



SEQUENCE LISTING

<110> Lie, Oystein
Slettan, Audun
Hoyum, Morten
Lingaas, Frode

<120> Verification of Food Origin Based on
Nucleic Acid Pattern Recognition

<130> 66849-019

<140> US 10/643,775

<141> 2003-08-18

<150> US 60/404,200

<151> 2002-08-16

<160> 1377

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 cactcccaga ctgtcctagc aaaatgtatc tttcctaaga agctttttta gtttattttt 180
 gacaatttca attgaaawca atcacattaa tgtacttcat taatacccag aaactatatg 240
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 attacgtggg ttgaatgctg taacaacacy gaataaaaca atgaatccaa tcccaygatg 180
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 gcttctcatc tctcmctctc catcctccta ctcattctca gactctcagg taagggtaac 180
 atgtttctat gaagtgtgta agttgaggtc agggactggg acaaatgttg gaactctgaa 240
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 gagcagagtg tagtttatga tgggtgggtat aataggacca gttaaaaata actttatTTT 180
 caaatacaca ctcaaacaga cagaggtgac rtaatgagag gacggaagga gaagacgtaa 240
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 accccttttac tggtcaggac gtgacagcta aac 213

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<400> 28
 ggaacacata aaacaaacac ccc 23

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caatctctaa tattaaggaa atctcaaggt tttgtctacc tgagctagaa tactcaatga 240
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<400> 39
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<210> 41
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 gtttaatctg gtttaaccag ggtatccaga aaaaacagac aacacatcaa gctctgactg 180
 actaataaca tgaccaagag tatccatcca ttactctaca gctgtgcaga aggtctgata 240
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<400> 43
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<400> 44
 gcagcgttta atctggttta ac 22

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<400> 48
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 actaaggggg acaaaaaatgt aatttcagaa tttgggggga gacatgtact catctgggtt 240
 aaagaatcaa tgtcttttgg ggtcttttgc attttattat attttatata caagtctaca 300
 tcttattatt tattttttt 319

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 gacattgact ctaggggatt taaactgtgt agtactacgg ctctattcaa tctgtatcaa 180
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 cagggaatat tgcccctaatt tagtacaagg aagctatgta gaaatacaga cgggtctaaag 180
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<210> 59
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tccagtttga tgccaatgca g 21

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cttgaatgat aaagacccat tttg 24

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<211> 155

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<210> 69
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 aagtccactt ggtgacatca caggctcta 209

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<400> 72
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aaaaaaaaac ctcctgtagt ggtttat 27

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<400> 84
 gcatcatgtt atgggttaac ttg 23

<210> 85
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 gtatcagcta tgcacagaca gatgttcttg tcaaagtcag 220

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agaggggcca gagtgaagaa taata 25

<210> 87

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<400> 87

aaaaaagagg ggccagagtg aagaataatg 30

<210> 88

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<400> 88

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tcattggtatc	caattggtwg	tagttactgt	cttgtctcat	cactgcaact	cccgtacgga	180
ctcgggagag	gcgaagggtc	agagccatgc	gtcctccgaa	acacaaccca	accaagccac	240
actgcttttt	gacacaacac	acatccaacc	cggaagccag	ccgcaccaat	gtgtcggagg	300
aaacaccgta	cacctagcga	cctgggtcagc	gtgcactgtg	cccggcccgc	cacaggagtc	360
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tttcatggta tccaattggt a 21

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aaaaatttca tggatatccaa ttggtt 26

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<212> DNA

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<400> 92

gtagttactg tcttgtctca tca 23

<210> 93

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<400> 93

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cagcctcatt taaaaccag ctctgagcat accgctgtca tcaataccag ttgtgatgag 180
ggtagctcat aaaatccaga cattgttact gatagccttt agattgtctg agccttcagt 240
ctttatagya cccagctgtc ttctccggtc tgtcactcct cagctgaaaa tgtcttcac 300
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<213> Salmo salar

<400> 95

aaaaaactga gccttcagtc tttatagt 28

<210> 96

<211> 21

<212> DNA

<213> Salmo salar

<400> 96

accagctgt cttctccggt c 21

<210> 97

<211> 400

<212> DNA

<213> Salmo salar

<400> 97

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gaattttttg ttttgatatac attgtgtatg atgttgtttt tgggcagttg tgttacttgt 60
tcgttttgcgt aaaagtaatg ccggcattgt tgggtctggt tttagcatma tgtgggtggac 120
ttccctttga ctttcattcc aaatacctca ggacttcac tgcataatcc cactcctcta 180
gcggaaggac agccagtcaa ttccttcgct ccaccttttc ctttccagtg taagtacagt 240
agcctacgca aaataacctt ggagatgttt tccttatgag gtagctccag atgtagggac 300
cttagaatca catgtagccg gcctacatta gcctagatac catgtgttct ataatgtcaa 360
caatattagg cagacccttc taattactta cgtaattctc 400
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<210> 98

<211> 22

<212> DNA

<213> Salmo salar

<400> 98

tggttggtct gggttttagca tc

22

<210> 99

<211> 28

<212> DNA

<213> Salmo salar

<400> 99

aaaaaatggtt gggctctggtt ttagcata

28

<210> 100

<211> 21

<212> DNA

<213> Salmo salar

<400> 100

atgtggtgga cttccctttg a

21

<210> 101

<211> 264

<212> DNA

<213> Salmo salar

<400> 101

aagtttgaat tgattcttgg tacttagagc tgggaaccac tggatgtaac tctaagacta 60
 caagtgaatg gtttttagctt ccctctgaat caacctcggc agtggtgctt ggcacacac 120
 ttttttagctc aacacaacaa cacctgattc aaatgaacta ataactmatc ttaatttttag 180
 cccacaattg gtttcatcag gtgtgctgct gtggggctgg agaaaagtgt gacatcaaca 240
 cggctcttga ggactgcagc tgca 264

<210> 102

<211> 25

<212> DNA

<213> Salmo salar

<400> 102

cctgattcaa atgaactaat aactc

25

<210> 103

<211> 27

<212> DNA

<213> Salmo salar

<400> 103

aaaaagattc aaatgaacta ataacta

27

<210> 104

<211> 22

<212> DNA

<213> Salmo salar

<400> 104

atcttaattt tagcccacaa tt

22

<210> 105
 <211> 565
 <212> DNA
 <213> *Salmo salar*

<400> 105
 ctttgtcttg atgaacggtt gaaatgtagc cccaacagcc ctcaaactca actctgcatg 60
 ttttcattgt tcccctctag tcagtgactg atttaaacct gtgacaccag gtgtgtgcaa 120
 ttcattacca ggtagaagag aaaaccagca ggctccaaac ctctagggta agagttgagt 180
 atccttgccc aacagggttg ccttcatgta acttgtaata tacatgtaac tcaagtatac 240
 aaggctctgt ttgttatggt ttataaaact agtgtaaggg tttaaaaaaa atactgtcct 300
 atgttgacca taacctacta ctcaaatgca tcatgaattt gcatgctcca aaagagactc 360
 atctgtgcta gattaaaagt ggctaaatca gttgtgatgt aaatcatgtg catagtcaca 420
 cgtggtttat gtttctgggt gactgggtgg aacattactt tgccataagg aacgtgctgc 480
 attattaagg catgcctcaa ataaaacagg ggttcttgga attaatcgaa tacgtttagg 540
 caaacagtta cagcacataa tagtc 565

<210> 106
 <211> 482
 <212> DNA
 <213> *Salmo salar*

<400> 106
 tgagagcata gtaattctga agtaattctg aaaaaaatct gaaaaaaatt atgcttttat 60
 ttttcttcac aaaaatagtg cactgggctt tttaatagtc ctgtattagc agcaacatta 120
 gtccagcatt ttatgtcact tcgaggaata caacactgag tcttgcatga atccccgtt 180
 gttctggaag actgtgtgat cttgctcccc ttggccagat gtaatagcag gacgcgttct 240
 caaagcatgc gcacagcagc tggcagggtg cttcacagac attttcaatc tctccttgct 300
 gttgtctgta atcccaaaat gtttcaagct gaccaccatt gtccctgttc ccaagaactc 360
 aaagataacc tgcctaaatg actatcgtcc tgtagcagcc acatctgtaa ttatgaagtg 420
 ctttgaaaagg ctgaacatga cacacatcaa caccatcatc ccaatacgca tactgcccc 480
 aa 482

<210> 107
 <211> 552
 <212> DNA
 <213> *Salmo salar*

<400> 107
 tgagggttgc ccctctctct tactctctct ctctccctgt cctccgccct gacgaatctc 60
 cccatacaaa accatctgtg tcatttcatt aaccgcactt ccctcgttct ctctctctct 120
 ctccctcctt ccctctctcc ccctggccgg ggttcacat gttagtgtgt ccgtattcat 180
 ggagccgtcc cctcctgcat agcgtaatga agtcaggacc tctcagcacc actgtaattc 240
 cagcgactag tttgtgcaac gcaacaattt atcacttgct acgaagacac ttagtgttgt 300
 actgcttaac aaggacatcc tgtgagcctg ggctactagc agggagccgt ttgcatattt 360
 actaaatgcg gagtgtcatt gccaccacgg cctgttgcc tcatgaatta tttctctatc 420
 tgcaataaac agatgggtaa ttattactgc cataatcaga taaattctct ctgtaatgtt 480
 ctaacgtggc aaaatctttt aactcattgc aggctgaggg atatttatag actcagaatg 540
 gtgaggctga ag 552

<210> 108
 <211> 437
 <212> DNA
 <213> *Salmo salar*

<400> 108
 tctctgtact ttgctcagtt catctttccc tcaatcctga ctagtctccc agtccctgcc 60

```

gctgaaaaac atccaaacag catgatgatg cctccaccat gcttcaccgt agggatggta 120
ttggcgatga gaggtgccag ctttcttcca gacatgacgc ttggcattca ggccagagtt 180
caatcttggg ttcacagac cagagaatct tgcttctcat ggtctgagtg tccttttaggt 240
accttttggc aaacaccaag caagttgtca tgtgccttgc atgtgtcatg tgccgaattc 300
actgcacttc cattcagttt ttcaacttgt actgggggac tttcagacct tcttgtgagg 360
cctgtgggca tcagagcaaa acgtgtacat aagagtctca cctttccaca gaggggtcat 420
attaggttgt aactcaa                                     437

```

```

<210> 109
<211> 639
<212> DNA
<213> Salmo salar

```

```

<400> 109
tagcatgagt tccagtctgt ttgtgctatt atgacaactc ccagtcagca gcgatggaat 60
agacacgcgc acaaacagat atgtgacaag gctactgtct gtatacatgg cctattttttc 120
attgtttgtt gagaacctgt cctataccgt acagttaaag tcatcattac catgttttgc 180
tgtaatggag gttctcagtg atacatatag acaatgccct ttattatcta gtataaacag 240
tagctttcca ttccactgtc ccactttgat tgcaatataa gtgctttgaa ttaattgata 300
cccaacatgt tcacacgtta catacactag tggttctggg ggggggggga cagtgccct 360
gtgacaacaa ttttggaacc ctttgtggcc ccctaataatg tggagaatga actaattttt 420
acataactaa tttttgctat cgttcttttt ttacatccgt tattagacag tggcgacgat 480
gatgattatg agcatggctt tttgcctgct aatgcctgca atgcagtga gaaaacgata 540
tgacaacaat aacgtctaata gtaactggcc cctctaacag tgcaactggc ccagcttgg 600
ccaccccgat tgaaatgggtc tagaacggcc actagttac                                     639

```

```

<210> 110
<211> 934
<212> DNA
<213> Salmo salar

```

```

<220>
<221> misc_feature
<222> 42, 101, 219, 220, 222, 251, 400
<223> n = A,T,C or G

```

```

<400> 110
ttttacagtg gatatagata cttttgtacc tgtttcctcc ancatcttca caaggtcttt 60
tgctgttggt ctgggattga tttgcacttt tcacacaaaa ntacgttcat ctattggaga 120
caaaacacgt ctcttctctg agcggatga aagctgcgtg gtcccatggg gtttataactt 180
gcatactatt atttgtacag atgaacgtgg taccttcann tntttggaaa ttgctcctaa 240
ggatgaacca nacttgtgga ggtctacaat ttttttctg aggtcttggc tgatttcttt 300
tgattttccc atgatgtcaa acaaagaggc actgagattg aaggtaggcc ttgaaacaca 360
tacacagact caaatgatgt caatwagccy mtcagaagcn ttctaaaaasc catgacatmw 420
yattttgtgc attttccaas ctgtttwwar gsrcagtcaa cttagtggta tgtaatcttc 480
tgacccaatg gaattgtgat acagkgaatt ataagtgaat taatctctct gtattaattg 540
ttggaaaaat gacttgtgtc atgcacaaag tagatgtcct aaccgtcttg ccaaaactat 600
agtttgttaa caagaaattt gtggagtggg tgaaaaacga gttttaatga ctccaaccta 660
agtgtatgta aacttccgac ttcaactgta catgtcattt caggtcaata accacagtca 720
cgtgttaggt ccaaggtgtc ataatatgcy actgtggctg tttgttctg ctgtatctaa 780
gagactttgg actgacccaa taacaacagt gaagttagtt tgacattggt tccccggtg 840
tatgaaaccc tgcaccgcag cccctacta aaagcctgca gttccctctt tccctccttt 900
tatgagatgt acagtatgtc ctgtaacctc tggt                                     934

```

```

<210> 111
<211> 558
<212> DNA

```

<213> *Salmo salar*

<400> 111

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ttcttttagcc atctcagtga tttgggtttca caaggctctc tgggactttg ttgttttggt 60
tggtactttct gtaaaagttg ttagcctaaa gctgttatca aaaactatta tactgaacac 120
aaatataaac gcaacatgca acaattttta agattttgtt gagttacagt tcatataagg 180
aaatcagtca atctaaataa ataaaattggg ccctaattcta tggatttcac atgaatgggc 240
atggggccagg ccatgggtag gcctgggagg gcataggaca acccactggg gagctaggcc 300
cagccaatca gaattagttt cccctacaaa agggttttatt acagacataa atactcctgt 360
atacatctgt attcattttct agctgaaggg acttaagagg ggacctgggg acttatgaca 420
tagcgtttgg cagtggttcc aggtctggtg acacgagcag tattggactg tgatgaatga 480
catgtatcta aatatagtga ggagccccac ttcacccggg actccagttc acagacagaa 540
acacacagcc caggccaa 558
```

<210> 112

<211> 427

<212> DNA

<213> *Salmo salar*

<400> 112

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cgcactact tgcgaccctt atgctgtaaa cacagtccag ttcagtctgt caatgcaatt 60
gaatcctacc ccaatgcgct ctgcctacaa gaaaatatct tgcatagttt gttttgtttt 120
ggtagttgc attgaaagtg gctaattatt cattgattcg atcacaattc acacagtaga 180
gggaaatggt gatagtatta actaaagcgg aaaactagaa agttgtgtga agttcagtcc 240
agggagagct gcttagagag aatattggtt acagatgggt agaggtagcc tgagaatctt 300
ccagaacatg taattcctgt agtctacccc tcttctcttt ttaccttttg tctttgtaaa 360
actcagggtta tctggagtca ttatacagtg ccctgctgaa aaatacctca aagcgggtggc 420
atttgtg 427
```

<210> 113

<211> 36

<212> DNA

<213> *Salmo salar*

<400> 113

```
tgtaaaacga cggccagtcc ccaggaatgt tctcac 36
```

<210> 114

<211> 39

<212> DNA

<213> *Salmo salar*

<400> 114

```
caggaaacag ctatgacctt tcccctcaag cataatcta 39
```

<210> 115

<211> 34

<212> DNA

<213> *Salmo salar*

<400> 115

```
tgtaaaacga cggccagtgc tcgggctcgt caga 34
```

<210> 116

<211> 38

<212> DNA

<213> *Salmo salar*

<400> 116
 caggaaacag ctatgaccat tttcaggtct tgccgtag 38

 <210> 117
 <211> 38
 <212> DNA
 <213> Salmo salar

 <400> 117
 tgtaaaacga cggccagtta ggtgggggtgt aaaagtcc 38

 <210> 118
 <211> 39
 <212> DNA
 <213> Salmo salar

 <400> 118
 caggaaacag ctatgaccac tcaaatttgg gtctgaatg 39

 <210> 119
 <211> 39
 <212> DNA
 <213> Salmo salar

 <400> 119
 tgtaaaacga cggccagtga cccttgggta aatcaaadc 39

 <210> 120
 <211> 38
 <212> DNA
 <213> Salmo salar

 <400> 120
 caggaaacag ctatgaccgc gactgctgtc atgtctac 38

 <210> 121
 <211> 39
 <212> DNA
 <213> Salmo salar

 <400> 121
 tgtaaaacga cggccagtca caaccccata cattattca 39

 <210> 122
 <211> 37
 <212> DNA
 <213> Salmo salar

 <400> 122
 caggaaacag ctatgaccgg gtagaggaga ggaaagg 37

 <210> 123
 <211> 39
 <212> DNA
 <213> Salmo salar

<400> 123
 tgtaaaacga cggccagtga cccatggcaa atcttttca 39

 <210> 124
 <211> 34
 <212> DNA
 <213> Salmo salar

 <400> 124
 caggaaacag ctatgacccg tgaccgggag gctc 34

 <210> 125
 <211> 39
 <212> DNA
 <213> Salmo salar

 <400> 125
 tgtaaaacga cggccagtgg aaacagagtt cgggacagg 39

 <210> 126
 <211> 38
 <212> DNA
 <213> Salmo salar

 <400> 126
 caggaaacag ctatgaccgc agaagaatga tgggcacc 38

 <210> 127
 <211> 39
 <212> DNA
 <213> Salmo salar

 <400> 127
 tgtaaaacga cggccagttg tccaaatcct ctttccctc 39

 <210> 128
 <211> 38
 <212> DNA
 <213> Salmo salar

 <400> 128
 caggaaacag ctatgaccca tgtcacctgg agctgatg 38

 <210> 129
 <211> 38
 <212> DNA
 <213> Salmo salar

 <400> 129
 tgtaaaacga cggccagttg tagtgccctt gggttcat 38

 <210> 130
 <211> 38
 <212> DNA
 <213> Salmo salar

 <400> 130

caggaaacag ctatgacctg cccagcatta ggttaagg 38

<210> 131
 <211> 38
 <212> DNA
 <213> Salmo salar

<400> 131
 tgtaaaacga cggccagttt gttggccaaa tatgaacg 38

<210> 132
 <211> 39
 <212> DNA
 <213> Salmo salar

<400> 132
 caggaaacag ctatgacctg caacattacc ttcagcaca 39

<210> 133
 <211> 38
 <212> DNA
 <213> Salmo salar

<400> 133
 tgtaaaacga cggccagttg ggggtcatag agcaaaac 38

<210> 134
 <211> 38
 <212> DNA
 <213> Salmo salar

<400> 134
 caggaaacag ctatgaccga gggcacagac tacagtgg 38

<210> 135
 <211> 38
 <212> DNA
 <213> Salmo salar

<400> 135
 tgtaaaacga cggccagtct gtcgggagaa acacgatt 38

<210> 136
 <211> 38
 <212> DNA
 <213> Salmo salar

<400> 136
 caggaaacag ctatgaccag ccatcccaag gttctttt 38

<210> 137
 <211> 39
 <212> DNA
 <213> Salmo salar

<400> 137
 tgtaaaacga cggccagtca ttcaaattga catcgcaaa 39

<210> 138
 <211> 38
 <212> DNA
 <213> Salmo salar

 <400> 138
 caggaaacag ctatgaccgt cctacaagcc ctggtcaa 38

 <210> 139
 <211> 20
 <212> DNA
 <213> Salmo salar

 <400> 139
 gccacaacaa cagttgaacg 20

 <210> 140
 <211> 20
 <212> DNA
 <213> Salmo salar

 <400> 140
 tcctccctct cagtctgtcc 20

 <210> 141
 <211> 20
 <212> DNA
 <213> Salmo salar

 <400> 141
 gagtatgcct cgaccaaga 20

 <210> 142
 <211> 20
 <212> DNA
 <213> Salmo salar

 <400> 142
 gctattccca cggagtacca 20

 <210> 143
 <211> 21
 <212> DNA
 <213> Salmo salar

 <400> 143
 tgacaggata acaaccccat t 21

 <210> 144
 <211> 19
 <212> DNA
 <213> Salmo salar

 <400> 144
 agccaggcag cagctctat 19

<210> 145
 <211> 20
 <212> DNA
 <213> Salmo salar

 <400> 145
 ttctgttcac gggtgattga 20

 <210> 146
 <211> 20
 <212> DNA
 <213> Salmo salar

 <400> 146
 tgggtggagct tcctgtcttc 20

 <210> 147
 <211> 20
 <212> DNA
 <213> Salmo salar

 <400> 147
 tgtgcgctat cttggatggt 20

 <210> 148
 <211> 20
 <212> DNA
 <213> Salmo salar

 <400> 148
 caaggtgatt tgggtgggttc 20

 <210> 149
 <211> 20
 <212> DNA
 <213> Salmo salar

 <400> 149
 tggaaactgg aaaagaagca 20

 <210> 150
 <211> 20
 <212> DNA
 <213> Salmo salar

 <400> 150
 ctgctttggtt tggttgagca 20

 <210> 151
 <211> 20
 <212> DNA
 <213> Salmo salar

 <400> 151
 aacttcccac aaaccacagg 20

 <210> 152

<211> 20
 <212> DNA
 <213> Salmo salar

<400> 152
 tgggggtaatg ggacattgtt 20

<210> 153
 <211> 20
 <212> DNA
 <213> Salmo salar

<400> 153
 atggctggta aactgccaaag 20

<210> 154
 <211> 20
 <212> DNA
 <213> Salmo salar

<400> 154
 tgcacagggtg acattctggt 20

<210> 155
 <211> 365
 <212> DNA
 <213> Salmo salar

<400> 155
 gagtgttcct gtcgtgtgtt ccagagagac aaagacacag cgatctgctg acaataggag 60
 cacagagctc aggggaagtgg tccttttcac ctccacacag tctccataga acacacacac 120
 acacacacac atacacacac acacacacac acacacacac acacacacac acacacacac 180
 acacacagcc ccaaatgaca cgtcttgcca ataatgtctg acctactggc aaataacatt 240
 ctactccaa tggtcattgc cagcactgca gacatgttga ctttgggggg gatccactag 300
 ttctagagcg gccgccaccg cgggtggagct ccaattcgcc ctatagttag tcgtattacg 360
 cgcgc 365

<210> 156
 <211> 363
 <212> DNA
 <213> Salmo salar

<400> 156
 ctggaaactc aaagagtgcg aggatgagaa cgcgaagccg ggtaaaaagt gagtttcaca 60
 cgcacgagcg caccgcagct cgcatgcaca cacacacaca cacacacaca catacacaca 120
 cacactccaa cagagaaatc ccctgcctcc cagatactcc cccagcatcc acaagacact 180
 actatgttat ctgtataacc agggagtatg tgtgtaacat gtgatgtccc ctctgataga 240
 gatcttacct agcccaagcg tcgtgacaga cagatccaga aatcaccaa cgccacacgg 300
 ggggggatcc actagttcta gagcggccgc caccgcggtg gagctccaat tcgccctata 360
 gtg 363

<210> 157
 <211> 312
 <212> DNA
 <213> Salmo salar

<400> 157

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gtattgtagc tcgactccca tttagacagg cacaccctt agaggacaga tagtcacacg 60
gtggatgtca acattatcct cagtgtgaagg ttagctatgg taacatattt ttggaggtca 120
gaaacataca acgatatgca cacacacaca cacacacaca cacacacaca cacacacaca 180
cacacatcct caaagaccac gatcaagaat attatcactc acagttgggc aggctgtttc 240
cagcgtagcc atccattccg tatgccttca gcgctctggg ggggatccac tagttctaga 300
gcggccgccca cc 312

```

```

<210> 158
<211> 313
<212> DNA
<213> Salmo salar

```

```

<400> 158
aaaagtccct gatggtcaaaa catcaggatt agcttttagat tagcattagg cgctaactcg 60
ctaagcttcg cttaacttgc tgagcaggtc ctaaagaaca aatagctcag ctctacccaa 120
tcacttcccc tgatactgac tgactgactg aacacacaca cacacacaca cacacacaca 180
cacacacaca cacacacaca cacacacaca cagcgtatag tatagtgttt gactgtgcag 240
tgagtcagc acatggatca tttgggggat ccactagttc tagagcggcc gccaccgcgg 300
tgagctcca att 313

```

```

<210> 159
<211> 419
<212> DNA
<213> Salmo salar

```

```

<400> 159
gctttccctt atcttactac accctcacac agaaacaaaa cacttgcaca ttcgcatgca 60
cacacacaca cacacacaca cacacacaca cacacacaca cacacacacc tcccagcttg 120
ctttgcttga taaatatgat gaccagaca ggctccatct cctgttggtga cctccctcac 180
ccccattacc ccctcaccac cctgccaagc ctggggggga tccactagtt ctagagcggc 240
cgccaccgcy gtggagctcc aattcgccct atagttagtc gtattacgcy cgctcactgg 300
ccgtcgtttt acaacgctcg gactgggaaa accctggcgt taccacaactt aatcgcttgg 360
cagcacatcc ccctttcgcc agctggcgta atagcgaaga ggcccgcacc gatcgccct 419

```

```

<210> 160
<211> 514
<212> DNA
<213> Salmo salar

```

```

<400> 160
ctttgtcatc ttatttttgggt gtccattaag gaactccaat actggagtgg aaaaagatgg 60
tttgtttcta gaaaagccac cgacgttgta gtattgttcc ctactgcctc tgatgcacca 120
ctctgcctct cacaaccacac agaaccacaga gtcagccata tctaactctga ggtccaacat 180
cacacgactc ctctccagct tcagggctac acacacacac acacacacac gtgaatatta 240
acagagcagt tccaaatgat gtcagacctc aggctagtaa ctatgctatt caatatatgt 300
atgacttcca actatagtaa ctgtatttct ctgaaatgggt attcatagaa atgttagcta 360
acaatggctg gactagatgg ctggagtgcg gtagaggcct aaacgttctg ctttttctat 420
tagctagcct aaaccccatc cagccattaa aagccattca aacttctata gcagcatcat 480
aaattaacca aaccattac gggccaaaga gtgg 514

```

```

<210> 161
<211> 297
<212> DNA
<213> Salmo salar

```

```

<400> 161
gaggatgaac agcagcatag cacacagagc actccgagtc agatcgctgg gttggaactg 60

```

```

ggctgctgcc ttaaataagaa ctgtaagggg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg 120
tgcgcgcgcg tgtgtgtgtg atctactatg tattctaaga ggctctgaga tagtgtggtg 180
tgatgccaca gcactctgaa tcattgggat aacagggagg ctcggtcaag gcacagtggg 240
ctgcaggaat tcgatatcaa gcttatcgat accgtcgacc tcgagggggg gcccggt 297

```

```

<210> 162
<211> 280
<212> DNA
<213> Salmo salar

```

```

<400> 162
gttcccagcc tgagtagagc acctctctgg tggacgggat cctccgagcg atcagaaccc 60
acagaggggt cagcgccaca aacacagcac acaccaacgg gttggcatag tcgttaaact 120
ctataagaga acacacacac acacacacac acacacacac acacacaggg gttaacatca 180
tcgttatgct atataacaca cacttcatca gctcaatata gaaactcaga ctgggtgtga 240
atgggaaatc gtcagtgttt ccatgtatct atgtgtggtc 280

```

```

<210> 163
<211> 501
<212> DNA
<213> Salmo salar

```

```

<400> 163
cagtagtaat ggtatggagg ttagagtagg aaggagtctt tgtgttacct cccctcatta 60
atgacagaac agaattaaga gggttccacc caccagaagg tgtctaggag tatgaactag 120
gggttgattt gggcatgtct aactgttaac ttctctctct ctctcctctc tctctctctc 180
tctctcctct ctctctcct ctctcaggaa cgatgggaca gaatttgggg gttctatcta 240
ccagaagggt gatgaccagt tggagacggc ggtcactctg gcctggacgg ccggcagcaa 300
caacacacgc ttcggcatcg cagccaaata cgctctggac aaagatgctt cctgtctgt 360
gagtaacaca cacttacgtt tacacacacg ttccatttac acgctttacc ctggcgggac 420
ttcagccagc ttacacact aacacacgct ctctggctgt ctctaactgt gtgtccccct 480
gcaggccaaa gtgaataacg c 501

```

```

<210> 164
<211> 564
<212> DNA
<213> Salmo salar

```

```

<220>
<221> misc_feature
<222> 128, 247
<223> n = A,T,C or G

```

```

<400> 164
ctctgaaatt cctgtgcggt ttggaagaat aagacatccc gcctacttta aaggcagtct 60
ttaaagcatg tgttacagca catagaaatg ctcttgtcat catcttgggt tagtttgaaa 120
tgccatgntg acattttcca aggtcacata ggctagcgct tctgagtcaa tgtctaggga 180
aagtaagacg gatgagagct gtcttcagta ggtctggata aggactgtta aatgagatga 240
gagaaanctc atcagaaggc tccatctctg tactgtatgt gtgtgtgtgt gtgtgtgtgc 300
gtctgtgtct gaatctgttc cagtactgct gagaagcatc tcatggcacc tcatttaatt 360
caacatccac agcacggtaa acacagacac acatttccag tctcactact ctaaagccct 420
cccaatggct cgcaattcaa tcatatcctg tctccttcta tggactgttt cgaaattgac 480
gtgtcagtc gaacatctgt gtgtgtggta tgtccacgga ctccacataa ttcacaaaga 540
atatcagagt aggtggtgat gtag 564

```

```

<210> 165
<211> 377

```

<212> DNA

<213> *Oreochromis niloticus*

<400> 165

```

gaaatgtttc aggggttcttg agaagtttcc aggagtcagc aaatagggtc aagtgggatt 60
tgaacatgtt ctaaaattcc tgacagaaga cagaatgggc catgaggagg ctgagcagtc 120
cttcatcatg tttaaatagg gttcctatga tttttttaag gggcttcttt cttctctagt 180
ttcaagtgtc tattattggc cattgagaaa gttccaggag cactttcaga gggtctgcaa 240
acagatgttg ttaaagaagc tattgcagta gggctaattt gaaatagggt gtctgatttt 300
gtcactgaag tactaaaagt atagtaaaga agtatagtct ttgaaatgtt tcaggggtct 360
tgaagattct gaaggtc                                     377

```

<210> 166

<211> 40

<212> DNA

<213> *Oreochromis niloticus*

<400> 166

```

tgtaaaacga cggccagttg ttctaaaatt cctgacagaa                                     40

```

<210> 167

<211> 37

<212> DNA

<213> *Oreochromis niloticus*

<400> 167

```

caggaaacag ctatgaccct tcaagagccc tgaaaca                                     37

```

<210> 168

<211> 35

<212> DNA

<213> *Oreochromis niloticus*

<400> 168

```

aaaaatctga ttttgtcact gaagtactaa aagta                                     35

```

<210> 169

<211> 30

<212> DNA

<213> *Oreochromis niloticus*

<400> 169

```

tctgattttg tcaactgaagt actaaaagtg                                     30

```

<210> 170

<211> 30

<212> DNA

<213> *Oreochromis niloticus*

<400> 170

```

tagtaaagaa gtatagtctt tgaaatgttt                                     30

```

<210> 171

<211> 496

<212> DNA

<213> *Oreochromis niloticus*

<400> 171
aactcgagtt ttatgggtcac cgatcaacaa cctgcgaaaa aagataatct ttactgtttt 60
tttccatcac tattttattgt catgaccttt catggacctt tctttcatct gagaaaaatg 120
tgctaaaatg cacatgatgt ggtacaaagc cactgtgtgc tttttacaca tattccatct 180
tttgtaggat gtgtgtattc tgaatacaaa gattcttcaa agagtcataa tctaaataga 240
aacaacatta gagagaatca atgttaactgc aaagtgtgtc tcataagacc ccaggagttc 300
cagtgtagta ggtgtgctgg gtctataaat gcttaagaag gatgtaatac ttaagcatta 360
tgaatgccct tgcagaagta actcataata aataacacca acccaaatac taagactaat 420
taaaaagggtg aacataatat tgtgggtatc tgtccacttt catcccaacc ttagtacggc 480
aatgctacat gaatat 496

<210> 172
<211> 37
<212> DNA
<213> *Oreochromis niloticus*

<400> 172
tgtaaaacga cggccagtta tggtcaccga tcaacaa 37

<210> 173
<211> 38
<212> DNA
<213> *Oreochromis niloticus*

<400> 173
caggaaacag ctatgaccta gcattgccgt actaaggt 38

<210> 174
<211> 28
<212> DNA
<213> *Oreochromis niloticus*

<400> 174
aaaaacattc ataatgctta agtattac 28

<210> 175
<211> 23
<212> DNA
<213> *Oreochromis niloticus*

<400> 175
cattcataat gcttaagtat tat 23

<210> 176
<211> 22
<212> DNA
<213> *Oreochromis niloticus*

<400> 176
atccttctta agcatttata ga 22

<210> 177
<211> 469
<212> DNA
<213> *Oreochromis niloticus*

<400> 177

```

agtagtgac atgacacagt tattcacatg aaaacattgc acgaaactca atgtgactgg 60
attacctgat catcttttagt ttgcaaataa acttactggg gaacaaaaac ctgaaccttg 120
gtgactcctg cccctagttt gcttcaacaa cccaatccac cattttttaca tatcttttagt 180
ccttttagaac aagttcatgc atcaaaatat taagtataca aaaaaaact atcctcgttc 240
ttgttctgcg ttttaatagc agaacatgac gactttgaaa acaggctgaa aacacagcac 300
gggtgctgctg gagaaaaagt gtgcgctca gcacagttaa aatctatcaa acccgcatg 360
ctgtaaagt aatcaaaagc ccatcccggt gctctgccac atcgccgctt aattaaacgg 420
tgagaatatt aatagaaaac tgctttatgt tgaagcagaa aataaatag 469

```

<210> 178

<211> 39

<212> DNA

<213> *Oreochromis niloticus*

<400> 178

tgtaaaacga cggccagtgt gcacatgaca cagttattc 39

<210> 179

<211> 41

<212> DNA

<213> *Oreochromis niloticus*

<400> 179

caggaaacag ctatgaccct atttattttc tgcttcaaca t 41

<210> 180

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 180

tcttggtctg cgttttaata a 21

<210> 181

<211> 25

<212> DNA

<213> *Oreochromis niloticus*

<400> 181

aaaatcttgt tctgcgtttt aatag 25

<210> 182

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 182

cagaacatga cgactttgaa a 21

<210> 183

<211> 717

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 91

<223> n = A,T,C or G

<400> 183

```

agtctcttca tttgcaagcc acccttttga gaaaactcat ttctgccact tttatctgcg 60
atcttggttca ttctgtcact acccagagct natgcaacaa agatcaactc gacagctttg 120
ctttcacgct cagctctttc tttgccacaa gagaccacaa cagtctgtat cactgctgat 180
gctgcaccaa tctatctgat agtctcccgc tcaactcttc cttcactcgt ggataagacc 240
ccagggattc ctttacttgg ggcagtaact cattcctgac cctaagtagt cactctatcc 300
ttcaccaact gaggactctg accttggact ttgaggtgca gtatggctac tgaaccagat 360
actttggttg tgcctggttg aacaaactcc cacgcaacct aaaataaaaag gaacaaactc 420
tctgggtccc cttatcaaaag tggggaacca caattccgag ttccaatcca gatagatttt 480
cttagttttt tgtgcccacc acaaagtcct gccctcaacc caatagaaca tctttggaat 540
gaattacagc agaaactgcg agccagagca gctcatgcaa catgagtgtc tgacctcata 600
aatacacttc tggaagaacg gttaaaaatt ccataaaca caccttatgg aagtcttgaa 660
gtgttgaggc tctttgagca gcaaagggtg ggacaacatc attttaaccc tatcgat 717

```

<210> 184

<211> 38

<212> DNA

<213> *Oreochromis niloticus*

<400> 184

tgtaaaacga cggccagtgc caccctttgg agaaaact 38

<210> 185

<211> 38

<212> DNA

<213> *Oreochromis niloticus*

<400> 185

caggaaacag ctatgaccaa aatgatgttg tcccaccc 38

<210> 186

<211> 23

<212> DNA

<213> *Oreochromis niloticus*

<400> 186

aaaaagaggg caggactttg tgc 23

<210> 187

<211> 18

<212> DNA

<213> *Oreochromis niloticus*

<400> 187

gagggcagga ctttgtgg 18

<210> 188

<211> 19

<212> DNA

<213> *Oreochromis niloticus*

<400> 188

tgggcacaaa aaactaaga 19

<210> 189

<211> 468
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 189
 atacatggct taaataaaca aagtcacttc tattatccat ccattcatcc atggatgtgg 60
 agcagtagcg actacctcac agtccactag tccccagttg tgttacagaa gttcttcagt 120
 tatctgcacg ccacctggat agaaagaaaa aagcaatcta tcaaatatgt tttttgtctt 180
 cttcctgtgc acttgtgctc taatcaggtg atttcggtta atgtggaaaa tagtggagcg 240
 gaacagcaaa acaggttttg aggagtgaag atacacatgg acattgcttt tttttttatt 300
 gcacaaaagg agcatgatgg taaaggggaa gctgcatcca ggacagaaac agctgcattt 360
 tactgcattt ttcagcttct ttcaagcacc tgcacaaaca gcattccta gctaagctaa 420
 ccaggagccc agatcatga caaagctgag tgaatgccca accccatt 468

<210> 190
 <211> 41
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 190
 tgtaaaacga cggccagtca tggcttaaataa aaacaaagtc a 41

<210> 191
 <211> 38
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 191
 caggaaacag ctatgaccgt tgggcattca ctcagctt 38

<210> 192
 <211> 26
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 192
 aaaaacacta ttttccacat taacca 26

<210> 193
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 193
 cactattttc cacattaacc g 21

<210> 194
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 194
 aaatcacctg attagagcac 20

<210> 195
 <211> 528
 <212> DNA

<213> *Oreochromis niloticus*

<400> 195

```
atccctgcca cactgctttg gctattttgca ccgaaacccc ccacttccag cttccagtaa 60
tggaggacaa ctaatcagaa tagagctggt ttaaaagggg gaagagttaa aacagtttgc 120
ccctcaattc attgtcagtc tgaaataatg tcacgggtat acagcgaatg aatacattta 180
aaagagtttc caccatggtg ttacaacagc actttgtctt ttgtgttata attatatatc 240
attttaaata agagttcttt ggttttattg ggcaaacac agtatttgca ggggagagta 300
aaaagactgc tcttatccat atatataagc atatgagcgc agtccttactt ggttcgtagt 360
aatcatagat gacaaccgta gcttcctgga ctttggaac tttataactca ataatcagag 420
gaatctggac acacatctcc gcgttggtcac ctggaaataa atgtacaact taagcttcag 480
tatttacact cagacacatc agtgtttgtg agccgctcac tgagtcca 528
```

<210> 196

<211> 38

<212> DNA

<213> *Oreochromis niloticus*

<400> 196

```
tgtaaaacga cggccagtgc cacactgctt tggctatt 38
```

<210> 197

<211> 38

<212> DNA

<213> *Oreochromis niloticus*

<400> 197

```
caggaaacag ctatgaccgc gctcacaaac actgatgt 38
```

<210> 198

<211> 22

<212> DNA

<213> *Oreochromis niloticus*

<400> 198

```
aaaaatccag gaagctacgg tt 22
```

<210> 199

<211> 17

<212> DNA

<213> *Oreochromis niloticus*

<400> 199

```
tccaggaagc tacggtc 17
```

<210> 200

<211> 23

<212> DNA

<213> *Oreochromis niloticus*

<400> 200

```
gtcatctatg attactacga acc 23
```

<210> 201

<211> 618

<212> DNA

<213> *Oreochromis niloticus*

<400> 201
 tacacagacc tgggcaatth aaagtthcat tgtggatcac gattggthaa aaaccaacga 60
 actgcaaatt cacgcttgat atthcatatt ttagtgaaca cagagaaaat thctthctth 120
 agaathgaaaa tgagthgtht tctgagaaca aactggthtg ggathgthaa agacathctat 180
 atacaththt attgcactth aaatgtctgg tgaagtctga cactctthaa atgaaaccaa 240
 gactthtgth aattgctgga ttgatggcgg tcataaaaata tgacaaaatg ctggtgatgt 300
 cgacagactg ctgtggcagc cgcgaggaga gggcggcttc tcgtgaggtc atathcagag 360
 acaathctth aagactthgt tgctctatta aaaagtthga tgaagthcta cththgthaa 420
 tgcgcggtag atcaththgt tcccggctct caathcactcg ccaathcttc athcacctca 480
 attagathth tcacathatt accaathgth agtgacagct gtagathatg cagaathgtct 540
 tgctgathth atcacctta atgactgggc tagtcctgtg aagathgata caacathctt 600
 tcccagaggc agaathga 618

<210> 202
 <211> 38
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 202
 tgthaaacga cggccagtca acgaactga aathcacg 38

<210> 203
 <211> 38
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 203
 caggaaacag ctathgacctc tgcctctggg aaagathg 38

<210> 204
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 204
 gggaacaaaa tgathctaccg 20

<210> 205
 <211> 24
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 205
 aaaagggaac aaathgathct acca 24

<210> 206
 <211> 22
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 206
 cgcaththaca aaagthagaac th 22

<210> 207
 <211> 592
 <212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 536

. <223> n = A,T,C or G

<400> 207

```
tttcacagca tagtcagaga tgctgctgca ctcaatctat ggagatcaaa tacaacaaac 60
agacacatca actatatcaa gggaccatcg ctagctgtga gtgatgtcat taccattgat 120
tgggtgaataa aacacctacc cctataacct tcttggctcc agctttggcg gcaaaccatgc 180
aaaggatacc cgtcccactg cccacatcaa gcaccacctt gtccttaaaa aggtgcttgt 240
tgtggaacat ggaattgcgg tacgtgagag tgcgaacttc atccttcagc atctcctaca 300
gcacaaaagc aggattcatg aatacacaca caagtttcct tgagttactg ctctaaacac 360
acagattaca aaccagaaaa atacctcatg aattccaaag tgggcgtatg agtcaaagta 420
gtagtcctta gatgtcatgt cctcagctgc aggcttggct gagctctccc cctgggaaac 480
ctcacagaag accaagatcg tctcaattaa acatcatctt tgctaaactc agacanccag 540
cagctttgct ggcttcaaac cattaaatgt attaatatag caactctgtt cc 592
```

<210> 208

<211> 38

<212> DNA

<213> *Oreochromis niloticus*

<400> 208

```
tgtaaaacga cggccagtga tgctgctgca ctcaatct 38
```

<210> 209

<211> 38

<212> DNA

<213> *Oreochromis niloticus*

<400> 209

```
caggaaacag ctatgaccat ggtttgaagc cagcaaag 38
```

<210> 210

<211> 24

<212> DNA

<213> *Oreochromis niloticus*

<400> 210

```
aaaaagatac ccgtcccact gcct 24
```

<210> 211

<211> 19

<212> DNA

<213> *Oreochromis niloticus*

<400> 211

```
gatacccgtc ccactgccc 19
```

<210> 212

<211> 22

<212> DNA

<213> *Oreochromis niloticus*

<400> 212

acatcaagca ccaccttgct ct 22

<210> 213

<211> 543

<212> DNA

<213> *Oreochromis niloticus*

<400> 213

```
gcttaagcac ccagactcta ctccagaggc atgttcatgt aatatgtgca gaatgtgggt 60
tgtgcttggt ttttaagcaag aattctgtga gaaagcaatc tgctggattt tgcccatggt 120
gctcccaaac ttaggttaaag gtttaatttg ataggctatt aaacagtttt caatcaaaca 180
caagatttat gtgatttgca aacttaattc tgcttttatg tatttgtttt ttgttttttt 240
ttaaacagtg tcccctcttt taaataaagg gctcgaaagg accacagtac tgtaatttgg 300
gaattaaaaa ataaagcaaa ccaaccttgc aaatgtgccg taaactgccc atttattgag 360
ctgctttgta gtcatgccac acccattgtc caggacaatg actgcaggct tcccagact 420
ttcatcaaac agctgttaaa cagatactaa tactgagtta ccggtcttct ggatgcatga 480
gattaagcca gtattcaata aacatacagt gggggaaaaa agtatttagt cagccaccaa 540
ttg 543
```

<210> 214

<211> 38

<212> DNA

<213> *Oreochromis niloticus*

<400> 214

tgtaaaacga cggccagttc tactccagag gcatgttc 38

<210> 215

<211> 37

<212> DNA

<213> *Oreochromis niloticus*

<400> 215

caggaaacag ctagacctt tccccactg tatgttt 37

<210> 216

<211> 25

<212> DNA

<213> *Oreochromis niloticus*

<400> 216

aaaaaagtac tgtggtcctt tcgat 25

<210> 217

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 217

agtactgtgg tcctttcgag 20

<210> 218

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 218

ccctttatattt aaaagagggg 20

<210> 219

<211> 472

<212> DNA

<213> *Oreochromis niloticus*

<400> 219

atgtttaagt gaacatcaca tacacacccat cacacgtgcc cgcattgggag tggactgaat 60
gcagcatgga cagcagggga ggaggagaaa gctattcaat accttgtctg tcaggcacct 120
tcccagccct cgttcatgtt ttataactcg aagaggcacg tatcttactg tagctacttt 180
tgtgcatgcc ccgtcccagg agcaggagaa tgtgcctccg cctaagcttg tgcatctca 240
cacagcagct caccatctca ctcaaactga tagtttgatc aaaagagaca tagatattga 300
aaagagcttt cccctgggtg cagggctgtg acaatacgac gacaaaatta aatcactttt 360
ctttctctct gtctgccagc ccgtgcctg ccaatgtgtt attcacaatt cgagtcctaa 420
tctcgttagc ccaaaattgt ccaatttgat ttaatgtgca ttctgtcctt ga 472

<210> 220

<211> 39

<212> DNA

<213> *Oreochromis niloticus*

<400> 220

tgtaaaacga cggccagtgt gaacatcaca tacacacca 39

<210> 221

<211> 39

<212> DNA

<213> *Oreochromis niloticus*

<400> 221

caggaaacag ctatgaccaa ggacagaatg cacattaaa 39

<210> 222

<211> 24

<212> DNA

<213> *Oreochromis niloticus*

<400> 222

aaaaattctc ctgctcctgg gacg 24

<210> 223

<211> 19

<212> DNA

<213> *Oreochromis niloticus*

<400> 223

ttctcctgct cctgggaca 19

<210> 224

<211> 19

<212> DNA

<213> *Oreochromis niloticus*

<400> 224

gggcatgcac aaaagtagc 19

<210> 225
 <211> 770
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 225
 tgccaggctg cctgtgtaga atgtagacta gcattccagt gttcacacca tggagggatc 60
 cgcagcttgt atttgtggag aagccggctc accgtaagtc ttcttggtta ttcaaggggt 120
 tcaacttttta aaagcaacta ttacatcaat cacacaagag atgctgtata ccgaggaaaa 180
 aactcaccac aactgatgtc tacagtaccc tccctagaga aattcacacc aagatccata 240
 caggagaggt gtcactttta ttatcacggg gtgaatgaga ggcgatccct gataagtgc 300
 gcacaaatac agcagtcaaa cttttcttaa aagccataag caatgacatg gttttctttt 360
 tgcaggacgt acaaagtaaa gggtgggggc cgggtccatt ttattgttat taacaactga 420
 tcaaacaaat aaataaataa aactaatccc gttttaccac ctctcacatc tcattgatcc 480
 actgagacgg tgtgactgct ttctttcttt gatctcatat gaatagcccc acaccgaagt 540
 agccattcac ccataattat atgttattat tattctcctg actccaccat ttgactaatt 600
 ctgtttttcca catcgctaac accagcagtt acaggcatta gaaacatttt ctttttttgt 660
 attgtctttt atttctgcat tgcgacattc aggggtgtgat tgtgtaatca tcatcatgct 720
 cctgtggaaa tcaatggcag gtctgtgttc tattcctggc tactacaaat 770

<210> 226
 <211> 40
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 226
 tgtaaaacga cggccagtgg ctgcctgtgt agaatgtaga 40

<210> 227
 <211> 38
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 227
 caggaaacag ctatgaccga acacagacct gccattga 38

<210> 228
 <211> 25
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 228
 aaaaatgctg cacttatcag ggatc 25

<210> 229
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 229
 tgctgcactt atcagggatt 20

<210> 230
 <211> 19
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 230
gcctctcatt cacaccgtg 19

<210> 231
<211> 401
<212> DNA
<213> *Oreochromis niloticus*

<400> 231
acctgcagtt ggtaagggac tacatgttgc agaaacatgt catattgggc tttactgtca 60
tagactgtga agatggagat ggagatggaa tgaaccattt atacccatct tgaaacctaa 120
gcttttagcta tatgtactgc ttagtttttt taaataagt atcatatttc aattaaaggt 180
tggagcagta agctaatagt agcactaata aggaacatcc aaagacttgt ctgtcacaca 240
gaaaccttct aataaatgct cagtacattc caataaaatc ccagaatttt actactcaaa 300
ctggagcaca gacttcttgg acagtctgtc agtacagtta actacacaac agccgtatta 360
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<210> 243

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 ggagttaagc tgcttagata ttgccactac tgtacaaaagt aactctcact tcagatactt 360
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<210> 252
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<400> 252
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<210> 253
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<210> 254
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<210> 255

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<210> 263
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<210> 264
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<210> 265
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<400> 265
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<210> 266
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<400> 266

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24

<210> 267

<211> 501

<212> DNA

<213> *Oreochromis niloticus*

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 aagaagacca aatttatgct tcatgttaga aaaacattgt catgaattcc aaaaatgtca 240
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 cggtagggcga tggtaaggac tgtgcagtct gagaactctt tgcggatggg gttctgaatc 360
 aggttgctctg tctccagggtc aacagctgcc gtggcttcat ccagaattag gatacgtgac 420
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<210> 270

<211> 33

<212> DNA

<213> *Oreochromis niloticus*

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<210> 271

<211> 28

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<210> 272

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 acacaatggc agaaaaaacc ttggtggact gggactggcc cgtc 404

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<210> 275
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<400> 275
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<210> 276
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<210> 278
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<400> 278
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<210> 279
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<213> *Oreochromis niloticus*

<400> 279

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atztatagca gtgctcctgt gtccaaatgg taaagctata tttttttgaa agtaaaccac 360
agagtcgata tattaattgt cagtgtctgg ttgattgctt tccaacaaac caaaaccaga 420
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<213> *Oreochromis niloticus*

<400> 280

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<210> 281

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<213> *Oreochromis niloticus*

<400> 281

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<400> 282

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<210> 283

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<400> 283

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<210> 284

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<210> 285

<211> 497

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<210> 297
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<213> *Oreochromis niloticus*

<400> 302

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<210> 303

<211> 605

<212> DNA

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cagcaaaaata tttccctcat atcaacagta ataattattca acattgctgt caatacattt 240

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<210> 307

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<213> *Oreochromis niloticus*

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<213> *Oreochromis niloticus*

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tgngttnttc cnannganct ctttgaagcc cccctcgagg ttnacggtat cgataagctt 60
gatatcgaat tcttgcagcc ccctgagggg cgggcgcgna cacacacaca cacacacgca 120
cacacacgca canacacaca cacacacaca cacacacaca cacacactta ctcttactct 180
tactgtagtg gcgaggggtgt atttgatgct gatgacgggc aaccgagcat cgatctgcac 240
acacacacac acacacacac acacacacac acacacacac acacacacac acacacacac 300
acacacacag agggcgaggg ggcgacgggt gcaacagtcc agttgcggtc gaggcattgt 360
ggtaggggtg tggcgggcgt ccgagtcggt ttgtgcctcc tctaactcgt cttctcctgg 420
caggactgac agaccgacac aaagtcacgc aggaagaag cacggccttag gatggcgagt 480
gcggcgccag ccaggaagcc gtgggggatc cactagtctt agagcggccg ccaccgcggt 540
ggagctccaa ttcgcnctat agtgagtcgt attacgcgcg ctactggtcc gttgttttac 600
aacggctcgtg actgggaaaa ccctggcgtt acccaactta atcgcccttg gagcaaaatt 660
cccccttttn gccaggntgg cgttaaataa gcgaaagaag gccccgaacc ggattcgncc 720
ctttccnaaa aggttggccn caatccttga atngncgaaa tgggaaattt ntaagcgttt 780
aaatattttt ggtnaaaaaat tcgcn 805
```

<210> 310

<211> 413

<212> DNA

<213> *Oreochromis niloticus*

<400> 310

```
atctgactgt agcaaatttg ctaaccagtc agtgtcattg caattcttca gatacatgaa 60
acatttctgt ggcactggta catgagacat acttaccaaa ttccacagca tatttctctc 120
cgaggctctt gccatctttt tttttttttt taagctatgc agaagggtgc agtgtttcta 180
ctggaaactg tttatcctcc aaacagcctg cttaaaatca atattttacc tccaatctcc 240
agttactatt cactgctctt tctttgtctg ctgtgtgtgt gtgtgtgtgt gtgtgtgtct 300
gtgtgtgctg aaagtgtgtg tacagctgtg cacaaatgca aatgattaca aagagccccg 360
acacagacat tgaaatacct gctgatatgc ttaaagttga tatgatagta gat 413
```

<210> 311

<211> 605

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 2, 3, 4, 5, 15, 30, 394, 420, 452, 467, 470, 476, 483, 489,
502, 505, 508, 515, 517, 519, 525, 534, 535, 541, 543, 548, 551, 552,
553, 554, 560, 570, 573, 575, 577, 585, 592, 593, 594, 595, 599, 603, 604

<223> n = A,T,C or G

<400> 311

```
tnnnctctg aacantcttt ggcctttccn gccccttctc gaggtcgacg gtatcgataa 60
gcttgatata gaattcctgc agcccttttag cactgatgtg agttagcaga agatctggca 120
gaggctctgt gtgaatgctg gtcttatatg ctgggtggctt gattggaacc aggcgtggag 180
actgattgga ggctctgcct gaagggtggag ccagtgagg tggaaaaacc ccacactcac 240
ccagaccata acatatagtt ggtttacaca gctttgtgta tgtatgtgta tgcattgtgta 300
atgtatgtat agacacgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt 360
gtgtgtgatt tacattgctg tgcttgagag ccancatcta ccggaaccaa attccttgn 420
tttgtctgca catatacttg ggggggatcc anttgttcta gagcggncgn caccgnggtg 480
ganctccant tcgccctata gngantcnta ttacnncncn ttcanttggc cgtntttttt 540
ncnaactntc nnnnacttgn gaaaaaccn tgnncngntta cccancctta annnncttnc 600
tannc 605
```

<210> 312
 <211> 345
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 38, 231
 <223> n = A,T,C or G

<400> 312
 aaatcacaca tatgtgcaca cataccacac gcgcgcanac acacacacag gcgggtatcc 60
 ccgaccctgg gggagctgct tggttctccc acactcgctg tcattttttt tttttttttt 120
 tcttactgca gtgttttaga acattttatc taaactctgg aggatcgggc tggggtttcc 180
 cctagtaaca cacacacaca cacacacgca cacacacaca cacagtgcct ntccaaaggc 240
 tctccctgtc cttggcaagg acacattgaa ctgcgggact cctgccatac atagaaacac 300
 acacacacac acacacacac acacggacac tcattcacaa aatga 345

<210> 313
 <211> 618
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 13, 24, 29, 91, 118, 398, 517, 539, 541, 542, 547, 552,
 566, 567, 569, 573, 576, 578, 579, 580, 591, 592, 597, 601
 <223> n = A,T,C or G

<400> 313
 ctctcctttg gtnggagatc tacnggaang cccttcgttt ggggaaagta ccataagct 60
 tgatatcgaa ttccctgcagc ccactctggg ntagtagaaa agcgctatat aagaatgngg 120
 ggattttacaa gtccaatgtg taaacacatc ttccctcattc attattcttt gtcaaaccac 180
 caaagtgcag ccaaatatatt ttaattaagc aattgtgtgt tccttgaaca gcctagattc 240
 aaacagatct aatttagcat gtcattgtaa cctattgctt attatctttt attgacaaca 300
 gtgggatgaa cctgggcacg tgcacgcaca cacacacaca cacacacaca cacacagttg 360
 tgcaaagaaa tttggaaaaa caccatcatc agcacgtncg ccgtggctga cgacgcaa 420
 agcagctgag cttgagttgg agatcagtga agccagtctc tttgaagatg tattgccacc 480
 aggaaaaaaa atttttgacg cttcttcctt aaagcanggg gggatccact agttctaana 540
 nncgggncgt cnaccggggg tggganncnt ccnaantnnn cccctatagt nnagtcngta 600
 ntacgccgcc gcttcacc 618

<210> 314
 <211> 409
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 257
 <223> n = A,T,C or G

<400> 314
 cctgactcgt gctcagatta atatcaccat tgatcagatt ggatgggagg tgccttcaca 60
 cccgctccaa acacccccca ccccaaaca ccacacacac acacacacac acacacacac 120
 tccctcactc tttcattgca gggaataggg ctttgactc tgagaattcc agtaatgcgc 180
 ctttccgccca tgcagctgtg atttgaagca cacatgcgca tttcatattt atgtgtgtgt 240

```

gtatgtgttg gctttcntgt attttggcat gtgcaaaagt gcctgcaagc tcacctgcgt 300
gtctcacctc tttggtttta ttcataaaca cttcttcttc atgggtgttt ttttgggtgct 360
gctcttttga aaatgggtact gcaaaaagggc ctgcaaatgt gctgtgggg 409

```

<210> 315

<211> 227

<212> DNA

<213> *Oreochromis niloticus*

<400> 315

```

acaccattat gctataatgg tagtggtatt ggaggagggg atgatgagga agattaagat 60
gtccatctgt tgcccgcacag tcagctcaga tcagcatgtg gacgtactga ctgctacgaa 120
gccacacaca cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca 180
cacacagtgt gagacagcca acaggggttcg gcagaatcca acaggga 227

```

<210> 316

<211> 632

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 6, 12, 28, 36, 490, 504, 510, 548, 551, 569, 573, 576, 577,
580, 599, 616, 621, 622, 623, 628, 629

<223> n = A,T,C or G

<400> 316

```

tgtgtnttgt cngaaccttg ggtaccgngc ccccntcga ggtcgacggt atcgataagc 60
ttgatatcga attcctgcag cccccccgcc ccacgccctc tgcccaaact gtcgacaccg 120
ccgtaaacgg ggacgctcag ctgggttgtc tcccacgggtg acatgggtcac gtgggtgcag 180
ggcagtcaaa tgagactgct gtctgctagc gctcgttaca gtcaaaacca cctcactct 240
gaatcagtaa gtcacacaca ctcacactca cacacacaca cacacacaca cactctcaca 300
cacacacaca cacacacaca cacacacaca cacacacaca cacgctcact gtgggtcgcc 360
tgctcgcata gatctcttgc ggtttctgtt ttgggtcttaa agttagagga ggagaatatg 420
ttgagaagtt ttactggaat gcgtctcctt cctgtatgga gcgtaaccat ctgtgggggg 480
gatccacttn gtttctagag cggncgccaan cgggggtggga gctttcaatt tggccttata 540
gtggagtngg nathttacgcg ccgccttant tgnccnnttn gttttaaaaa cgtttgttna 600
atttgggaaa aaaccnttgg nnnngtttnc cc 632

```

<210> 317

<211> 654

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 2, 3, 4, 5, 6, 7, 10, 13, 19, 24, 28, 30, 31, 33, 36, 38,
40, 50, 72, 79, 82, 85, 146, 148, 151, 169, 175, 178, 559

<223> n = A,T,C or G

<400> 317

```

gnnnnnnggn gangttgtnt tgnactngn ngngtntnan ggaacttten caagtgcctt 60
tccgcttttag anctagtgna tncgncaaac ggaattctgc cacaaacaca ggtcaaacca 120
cagtgttcag catctatatg gggtangnga ntgtcatgtt ccgcagccng ttgangtnaa 180
gccaaaacat accgatcatt tcagctactg cctgactcga ctctcccatg tgggtccaaat 240
ggctgaccaa ttaacagcag cttaactctt gagtccaaac agctatctct ctttctcaca 300
cacacacaca cacacacaca cacacacaca cacacacaca cacacacacc tgcataga 360

```

```
cataagcaga aaagcggatg cacacaagca tacaaagtaa tggacatgct gatccacaag 420
cacttagacc cagtgggctg caggaattcg atatcaagct tatcgatacc gtcgacctcg 480
agggggggcc cggtagccag cttttgttcc ctttagtgag ggtaattgc gcgcttggcg 540
taatcatggt catagctgnt tcctgtgtga aattgttatc cgctacaatt ccacacaaca 600
tacgagccgg aagcataaag tgtaaagcct ggggtgccta atgagtgagc taat 654
```

<210> 318

<211> 792

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 493, 549, 614, 622, 627, 631, 632, 643, 683, 686, 706, 712,
719, 734, 737, 740, 757, 758, 759, 763, 785, 788

<223> n = A,T,C or G

<400> 318

```
tttacctccc tttgaaagcc cccctcgcag gtcgacggta tgcgataagct tgatatacga 60
ttcctgcagc ccatcgcagc tgcctttata agcgatattg caatgggaca tttgcttctc 120
gcacgaacat tatccaacga tttccccctg aaggccttggc atgttcaatt tgagacgcag 180
cctaaaatac caggcagcgc atctcacacc ctggcatgtg gtggtgtcac tcctgttcat 240
cactcagttc ccgtagact cccactggag cgagatgggt ttgatgctgt gtgtgtgagt 300
gtgtgtgtgc aagccagttc tttcttaagt cttgtttgat ggtgcatttg tgcactttgt 360
tgtgtatctc tatttacttt ttagaggctg tgtgtgtgtg tgtgtgtgtg tgtgtgtgga 420
atgctgtctg tgtagtaaac agacgcagcg caagtcgggg gggatccact agttctagag 480
cggccgccac cngngtgag ctccaattcg ccctatagt agtcgtatta cgcgcgctca 540
ctggcccgnc gtttaacaac gtcgtgactg ggaaaaccct ggcgttacct aacttaacg 600
ccttgacgca catncccttt cncagntgg nntaatagcg aanaaggccc gcaccgaacg 660
ccctttccca acaggttgcg canccnaatg gcgaatggga aattgnaagc cntaaatant 720
tttgttaaaa ttcnccntan aatttttgggt aaaatcnmnt tantttttta acccaatagg 780
ccganatngg cc 792
```

<210> 319

<211> 347

<212> DNA

<213> *Oreochromis niloticus*

<400> 319

```
ctgcacacac agcatgtctt aaaaactaat gctgagctcc atcagggctg gatgccatga 60
gtcttaatta agacagccat gccaaagtcaa gaagtgaata attctactcc ccaccaacca 120
ccaccatctc cctattacac acacacacac acacacacac acagaagcct aaactctcat 180
ttgcagatgg atgagcgtgt agatgcagac aaaccacaaa gagagactca gattatcagt 240
tttaatgggt cagaaaaagc ttgctcagtg agtagtgtgt ggatgcctgt gtgggcgctg 300
agatagaaaa accatttagt cacacctaca tgagatacct gtttgtgt 347
```

<210> 320

<211> 602

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 3, 6, 9, 20, 27, 35, 77, 105, 106, 549, 551, 578, 588, 592,
595

<223> n = A,T,C or G

<400> 320

```

ttnngancntnt tggaccttcn gaccccntct ggagntcgac ggtatcgata agcttgatat 60
cgaattcctg cagcccntca gatttacagt ctatacttca tattnngatg gagtgggaaa 120
gaaaagcagg acaggcgag gacacacaca cacgcacaca cacgcacgca cacacacaca 180
cacacacaca ccttatggaa gctattagtt ctgataacta ttattacttc ctaatcatcc 240
tagtgtcatg ttgaacactt cacaggagtg agaagcttgc aaatctaagc aggcaggtgt 300
caaagcaaaa aaaaaaagaa gaagaagaaa aaaaggaaga aaaaaatgct gtaatgttgc 360
aataatgtgc aggcagctga ggagaaaatg actgcccaga tacagactgc agctaagtga 420
ttcagaagaa gaggctagcg agctttgact gaagcagatg gcctctgtta taaaaaagtg 480
cattaaacac aaagatcttc ttactttacc cacagaaaga taaagttgat gccgttttat 540
gaaccctgng nggatataaa gagcccacta ttgggaanta tggacagngc tncntntccat 600
gg                                                                                   602

```

<210> 321

<211> 814

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 3, 33, 53, 478, 493, 600, 610, 614, 640, 658, 660, 666,
687, 689, 713, 714, 720, 740, 744, 758, 766, 767, 770, 772, 778, 795, 813

<223> n = A,T,C or G

<400> 321

```

ttnactttta attccctttt gaacgcggcc gcngccgttc tagaactagt ggntccccca 60
caaaatctct ccagcctgta agaacaaaac aatgcagtct tatcagggat ctcttatttg 120
tttacacaac aaatcagagc cgactgggtg aaagtccctg cgcttttggt tatctcggct 180
aactgagggc agaagaacag gacgggccag ttgattactt gaggtgtttt gtgtgtgtgt 240
gtgtgtgtgt gtgtgtgtgt gtgtgtgcgc gtatgtgtgt gctgaactct ttacatttct 300
tttctttttc aggaagactt gcagcagttg atactcatgc ctctcccaa tgttgccatt 360
ctgggacctg tgtaaaagca gcaggattta cgctggaatt ttagttctgc tgagccaaat 420
aagacaggtc aggggtgaaga aggcacagcc aaataaaagc ctaccacaaa acggaaangt 480
tatgacaaat canactatga ggcaaaaaag aaagctcagc ttttttggtt tcatggacaa 540
aagaatttat gtggctggaa tatgacgagc taaataacat aatgttctgc cgggtgtgtg 600
gtgagttttn tttnatattga gtcgacaagc gccttttgtn actgggacca gttatttngn 660
agaaanaccc cattagaacc catgagnana tcaagaaagc attatttgcc canntctgcn 720
atatcttttc ccagaacaan acangcattt gcaaaaanat taaccnngcn gnaaccnnaa 780
gtccctgaaa aaatntttta aaagcggggg ctnc                                                                                   814

```

<210> 322

<211> 622

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 8, 25, 28, 31, 82, 455, 471, 512, 555, 562, 569, 596, 608,
615, 619, 620

<223> n = A,T,C or G

<400> 322

```

ttgatttnat tcccttgga acccngtncc ntttgagggt cgaccgtatc gataagcttg 60
atatcgaatt cctgcagccc cnttatatgc attcatccca tcacctggaa cacacacaga 120
aagctgagtc aactaaaaat aattactcta attactccat ttcactacta gtatttacac 180
aaaccagtga aacacacaca cacacacaca cacacacaca cacacacaca cacacacaca 240
cattgtgtca ctcttaaaga agtaataata caccaagaaa aatacctgac tgatgtaaca 300

```

```

ggaatacact ctgatcagat gccagactcg ttaaactggg ttcattgtgt tccttgccgg 360
gacagacgag cattagcaat ttacaattta ctgttccttg tttgaccttt atattttatt 420
gggggatcca ctagttctag agcggccgccc accgnggtgg agcttcaatt ngccctatag 480
tgagtcgtat tacgcgcgct cactggcccc tngttttaca acgtcgtgac tgggaaaacc 540
ctggcggtac ccaantttta tngccttgna gcacattccc ctttcgccac tggggntaat 600
tagcgaanag gccncccnm tc 622

```

<210> 323

<211> 766

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 2, 3, 4, 5, 7, 12, 24, 660, 723, 726, 752, 753, 760, 766

<223> n = A,T,C or G

<400> 323

```

tnnnntnttg gncctttgaag cccnttccgg gccccccctc gaggtcgacg gtatcgataa 60
gcttgatatac gaattcctgc agcccccgag tgtgtgtgtg tgtgtctgtt tgtggagtgt 120
ggtagctttt catctccaga ggggaaaaca caggcatgta tttgcttggt tttgttttcc 180
cctgcctccc tctcgttcaa gccctcgtct ctatgcctcc ctcacccccg agcttctatt 240
gtgtggctga gatgaaaact aaacagagcc gaacctgatc tctcctgtct gatgcacaca 300
cacacacaca caccacacaca gacacacaca aagatgtgca tgcctgcaga cgctctctgt 360
gtggctcctgc acgtcttttag atcttcacac agttgccgcc aaagtcttct agagtttgtgt 420
gcttatcaact gttctctttc tgcgcattat actacgagtt ttcagcagca gtgatttcac 480
caagtcgttt tggtcttttc gctttttcct ccgttacttc aaacagaagt agacaggaca 540
gaaatgtctc acaatgaaat aaacactgaa atactggtag agcaagagcg aagatgagtc 600
tgaaagatct cgatcgattc atgtgaagta ggactgctga tgagcctagt agaaggaccn 660
tggatattgg gcctgatgaa acgggaggtg atagcgggag gaaggggtgca ttgatctgcc 720
cancantgac aactgacaga caaacgcagg gnnntttgan acgcan 766

```

<210> 324

<211> 315

<212> DNA

<213> *Oreochromis niloticus*

<400> 324

```

actgacaaac acacttgacg tgagacacag tgaaagtcaa tactcttcgc cttcttcctt 60
tctcttctt tgactccccg tctccttcac tctcttcacc aaacatccgc atctattcct 120
gtcggacctc ctctcaaaac cacagaatac actcctcctc acacagacac acagacacac 180
agacacacac acacatacac aactgacta accacagagg cagaggcatg atggagccac 240
actaacaaaag cagccaccgg gaacacatga tgctgtgact caacatcatc cgtgcctgca 300
gaggacatca aaaat 315

```

<210> 325

<211> 810

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 3, 9, 18, 20, 32, 35, 619, 658, 704, 706, 723, 740, 747,
755, 758, 761, 791, 795, 810

<223> n = A,T,C or G

<400> 325

```

aantttgant gcccttttnan cgcggccgtg gncgntctag aactagtgga tccccacgc 60
accagcagca atactcaaac gtcccgtatc ttccgaggaa aggggtgtgc atgtgggagt 120
gtgtgtgtgt gtgtgtgtat gtgtgtgtgt gtgcttggca gtgacgaaag cgcagtata 180
agaacacgtc cctttcacct aagtcacaaa atattaccat gtgttgcaac tccatatata 240
ctcttttctt cttttatcat tcatttgta cacaatctg ctatctgtgt ccctgtgtgc 300
agcctacaaa aaacatgttt cagtccttt ttttttaatt ctgtgggctg caggaattcg 360
atatcaagct tatcgatacc gtgcacctcg agggggggcc cggtagccag cttttgttcc 420
cttttagtgag ggttaattgc gcgcttgggc gtaatcatgg tcatagctgt ttcctgtgtg 480
aaattgttat ccgctcacia ttccacacia catacgagcc ggaagcataa agtgtaaagc 540
ctggggtgcc taatgaagtg agctaactca cattaattgc gttgcgctca ctggccgctt 600
tccagtcggg aaacctgtng tgccagcttg cattaatgga atcgggcaac gccccggnga 660
gaaggccggg ttgccgtatt tgggcccgtt tttccgctt cttngnttac tgacttcggg 720
tgngcttcgg gtcgttcggn tgccggnaac cggntntngg nttaacttca aaggcgcgga 780
aattccgggt ntccncagaa ttcagggggn 810

```

<210> 326

<211> 834

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 7, 8, 9, 10, 11, 14, 16, 17, 18, 19, 20, 21, 23, 24, 31,
45, 46, 47, 68, 79, 84, 85, 86, 453, 467, 470, 473, 479, 489, 505, 513,
514, 517, 518, 519, 520, 521, 522, 525, 528, 530, 532, 544, 545, 546, 547, 555,
556, 557, 558, 559, 560

<223> n = A,T,C or G

<221> misc_feature

<222> 579, 592, 596, 602, 605, 608, 625, 630, 631, 632, 634, 637,
656, 672, 675, 676, 678, 679, 681, 687, 689, 692, 695, 696, 700, 701,
708, 710, 712, 717, 718, 719, 728, 729, 730, 731, 732, 739, 740, 741, 743, 744,
745, 746, 748, 755, 756

<223> n = A,T,C or G

<221> misc_feature

<222> 757, 758, 759, 765, 766, 768, 769, 770, 771, 772, 773, 788,
789, 790, 791, 792, 799, 800, 802, 803, 813, 814, 815, 819, 825, 829,
830, 831

<223> n = A,T,C or G

<400> 326

```

gagaggnnnn nggnngnnnn nannttatct ntgacatatg atctnnntga aacccccctc 60
gagtttangg aatcgatcnc ttgnnncgaa ttccgtgcagc ccacagttgc tcctctgcat 120
tgtcccgaat ggaaaccaag acagtagcag tcttttagttt ataggatttt cctgacgttc 180
aaggtgtcaa tatgacagac tgatgataaa cagaaaaata ttagcattt tcttgccgc 240
agccggtttc cagtgagaag acaatgacaa catgacgagc tgattgtaag aggttagctc 300
agcaagcctc cacctgagag agcttagttg tttcagcacc agatgcccc ccccccccc 360
ccccacacac acacacacac acacaccggc actgtgagtg accaaatgaa 420
aaaggggtatg aatcaaagct gcggcgctcct cnggggggat ccactanttn tanagcggn 480
gccaccgng tggagctcca attcnccta tanngannnn nnatnacnnc cncctactgg 540
ccnnnnnttt acaannnnnn gactgggaaa aaccttgng taccaccaact tnaacncct 600
tncanaanaa tccccctttt ccaanttggn nnantancca aaaaggcccc aaccnateg 660
ccctttccaa anaanntnnc ncaacntna antgnnaaan nggaaaantn tnaaccnna 720
aaaatttnnn nntaaaaann ncnnnnanaa aattnnnnnt aaaannnnn nnnatttttt 780
aacccaannn ncccaatnn gnnaaaaacc ctnnnaaanc aaaaanaann nccc 834

```

<210> 327
 <211> 619
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 7, 9, 13, 20, 586, 619
 <223> n = A,T,C or G

<400> 327
 ttgaatncnt tnggtaccgn gccccccctc gaggtcgacg gtatcgataa gcttgatatac 60
 gaatttcctgc agcccccggt cactatctag gacaccagcg gcggcgactt gtagtgtaac 120
 tttgcacaca aacagtgttt tctcactccc cccagatctc tttccatctc tcacacacac 180
 acacacacac acacacacac acacacagga aagggaaaagc agcgtgtcct gcaaccatca 240
 gcactttcac cgggtgtcctc gccagaccgt ccccgctctc tctcatgtcc ttaatgactc 300
 tccccacttg cgtcctctct cctcacctc cctaccgctt ttccctcctgc accgtcaatg 360
 cctccatcc tactccagca cccagttttg ggggatccac tagttctaga gcggccgcca 420
 cgcggtggag ctccaattcg cctatagtga gtccgtatta cgcgcgctca ctggcccgctc 480
 gttttacaac ggtcgtgact gggaaaaccc tgggcgttac ccaacttaat cgccttgacg 540
 cacattcccc ttccgcagct tgggcgtaat agcgaaagag cccgancccg atcggccttt 600
 ccaaacaagt gcgcaagcn 619

<210> 328
 <211> 794
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 3, 9, 13, 25, 34, 631, 642, 646, 675, 681, 683, 688, 712,
 733, 763, 782, 786, 790, 792
 <223> n = A,T,C or G

<400> 328
 tgntttgant gcntttgacc gcggngggcg ccgntctaga actagtggat cccccaaagc 60
 tttggagggt cctcaagcct taataaaagc caccagtgtt cactctaaag atgcttctcc 120
 tactaccgct gttctgtcca ggtcaaggaa gtttgagtcc cacctctccc atcgctctgg 180
 agaagccaga gagcctcaac actgtcacct tcagcgagga ctctgtgtaa gcgcgcacat 240
 gagtaaacac acacacacac acacacacac acacacacac atacacacaa aaatcagcta 300
 ttaataaacc gtctgcatgc ttcataatta cagacaatgc tcagagaagt gtgtgatgaa 360
 caactacttc ggcacgaggg gctgcaggaa ttcgatatac agcttatcga taccgtcgac 420
 ctcgaggggg ggccccgtac ccagcttttg ttccctttag tgagggttaa ttgcgcgctt 480
 gggcgtaatc atgggtcatag ctgtttcctg tgtgaaattg ttatccgctc acaattccac 540
 acaacatacg agccggaagc ataaagtgtg aagcctgggg gtgcctaata agtgagctaa 600
 ctacacattaa tttggcggtg cgctcactgg nccgcttttc angtcnggga aaccctggct 660
 gtgcccagct ggcanttaaa ngnaattngg ccaacgcccg gggagaaggc cngtttggcg 720
 tatttgggcg ctntttccgc tttcttggtt taactgactt ggntggcttg gggccgttcg 780
 gnttgngggn ancc 794

<210> 329
 <211> 340
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 329
 gtttgtgagt ctgtgcagaa atggcagagc aagcgtgtca gatgaagaaa aatgctgttg 60

```

tagaagtaaa tgagccaaaag tcctgaaaga caggagggtgt ggagagttat tttcagaaaag 120
gtcatagact ctgtgatcca ttaatgttga caccgataaa gttccctact gaagcatgca 180
tatagtccac acactgctac atctggctcc agtaactttc tgctccactg actgtatgtc 240
cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca cacacacgca 300
gtatcatact cagggtgtggg cggaggacct gtcctcttgg 340

```

<210> 330

<211> 523

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 400, 418, 419, 511, 523

<223> n = A,T,C or G

<400> 330

```

tgattgcact gctggatggt ggtatccttg ctgtgatact gtaagtcata tgaggggtggt 60
ctctctctct ctgatatttg ctataacaga caaactatga ccccccttgt ttgtgttttt 120
gaagccagtg atttaatgac ctctgctat ctagactgaa aagagtgaaa gttattcttg 180
acaaaagtgt aaacttgatt agaaattttt ttcaactgtc ttataattat tggctcactc 240
aatttgatt ttattttatt tgtattattt gttgcagaca taaaacacac acacacacac 300
acacacacac acacacacac acacacacac acacacacac tattgtttct ctaatggcaa 360
ttaggcaaaag gttcatctgg tagggtaggt tgaaattaan aagtgggggg atccactnng 420
tctagagcgg ccgccaccgc ggtgggagct ccaattcgcc ctatagttag tcgtattacg 480
cgcgctcact ggccgctcgt tacaacgctc ngactgggga aan 523

```

<210> 331

<211> 806

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 3, 4, 5, 12, 13, 14, 17, 30, 39, 463, 515, 532, 548, 616,
642, 649, 650, 658, 663, 665, 680, 694, 712, 725, 730, 733, 748, 749,
752, 757, 761, 768, 771, 774, 775, 782, 785, 788, 804, 806

<223> n = A,T,C or G

<400> 331

```

tgnnnnttga annnctntga atggcccttn ccgcggtgnc ggccgctcta gaactagtgg 60
atccccacaca tgtagttagt ttcctttttac actgctccgt gtgtgtgtgt gtgtgtgtgt 120
gtgtgtgctgt gtgcagtgat gtgtagtgt tttgtcctgt ccatggctct actgtgaaac 180
agactcttta acttttcaag cagtgaatgt ttttttgact caaggttgtg tgactttcac 240
ctgatgtatg ctgttagatt tcccactctt cagtaacccg tggacttgaa gcattatcaa 300
tgataaggaa taattcaagt tattccaggt gtccccaacc tcaaagggtc actatagtta 360
atcaacagta tagaaaaaaa acacatcagt gggctgcagg aattcgatat caagcttata 420
gataccgtcg acctcgaggg ggggcccggt acccagcttt tgntcccttt agtgagggtt 480
aattgcgcgc ttggcgtaat catggtcata gctgnttcct gtgtgaaaat gntatccgct 540
cacaattnca cacacatacg aaccggaagc ataaagtgtg aaacctgggg tgcctaaaga 600
gggagctaac tcacantaaa tgccgttgct ctcactggcc cnttttcann cgggaaanct 660
gtngngccac tgcattaatn aatcggccaa cgcncgggga aaagccgttg cntatttggg 720
cgctnttccn ttnccttggt atgactcnnt tngcttnggc ngttcggnnt nggnnaaccg 780
gnatnagnnt actcaaaggg gggnan 806

```

<210> 332

<211> 608

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 2, 9, 13, 15, 21, 39, 43, 91, 115, 551, 562, 569, 590, 596,
601, 603, 607

<223> n = A,T,C or G

<400> 332

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tntattttgnc tcncngaact ncttggaaac cccgccccnt ttngaggtcg accgtatcga 60
taagcttgat atcgaattcc tgcagcccac ncttgcctat tcaggctctt ctttngctgt 120
aacaccacca accccctcac actgacacac acacacacac acacacactc ccttcctcgc 180
tatctggcag tcttggtgcc tggaggaggt tcattctgcc ctccctctct cctcctctcc 240
tccacctctt tccttggtga tcggcagtga gagcgagaga gagagagaga gagagagggg 300
agggtgagaa aatgagagag cgagagagag agtggcagca gtagcggagg aagcagagct 360
gtctctcttc tgatcatctt tcttggatag agggataaaa ggcagtccca ggaatcagtc 420
gttgctcttg tctgcaggat ttacccagcc tgagtttatt ctccctcctt cctcttttca 480
cctcttcttg aactggacc gctagctttt acatctctct ctccgggggg ggatccacta 540
gttctagagc ngccgccacc gnggggggng ctccaattcg cctatagggn gtccgnatta 600
nccccnc 608
```

<210> 333

<211> 325

<212> DNA

<213> *Oreochromis niloticus*

<400> 333

```
tgtgccatcc tctacagcga gacaatttca cagtgtccaa agccgattct ctgcgcttgt 60
taattgaatc ggattttctta tagtttaaaa tccacacaca cacacacaca cacacacaca 120
cacacacaca cacacacaca gactcatgta gctacagccc aaactgtata aggggtttat 180
ctagctctgt aaagccaaaag caggagatat aaagacacac acagagccac agagagtatt 240
ttaccggcgt gtttgaacgt ttccaaatct cagaataaaa tgtcttcacc tgctgagggtg 300
tgtgtggctg tctcagtggtg tggga 325
```

<210> 334

<211> 621

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 3, 7, 8, 9, 13, 14, 24, 39, 621

<223> n = A,T,C or G

<400> 334

```
tgngttnnnc tcnngattcc ttngntaccg cgccccccnt cgaggctcgac ggtatcgata 60
agcttgatat cgaattcctg cagccccctg tcttcatggc acacacacac acagataatg 120
tgccctttac tgcaagatgt caaatgctaa agttcctcct taaacagata ttacaggaaa 180
aagagtttgt attttgttgt aagttaacgg ttgtcacaca atcagcttat aaaagtgaac 240
actattcctc actctcacac gcacacacag ggcagcacia atgaacaact gtacggtgca 300
ggattattac agtataagtt ttagaagcga tgactgtgac attcctcctc actgctgagt 360
tcatgactaa gacggattaa ctggacttcc atttctgctt atcatatgga tgggattaac 420
ctgtgctatg gatctcacac acacacacac acacacacac acacacacac acacacacac 480
acacatatat acaggaacag ctcagcacag aacacacact cacactccct gtagtagggg 540
gggatccact agttctagag cggccgccac cgcggtggag cttcaattcg ccctatagtg 600
aggctcgtatt acgcgcgctc n 621
```

<210> 335
 <211> 606
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 20, 383, 436, 437, 496, 497, 508, 512, 513, 517, 551, 558,
 569, 587, 605, 606
 <223> n = A,T,C or G

<400> 335
 gtttgaacct tgggtaccgn gccccccctc gaggtcgacg gtatcgataa gcttgatata 60
 gaattcctgc agccctactg cgatcgacta caggcggcag tgcgacttca gcaccacgga 120
 cagtgccatg aacacagcaa ggcaaggcac tgactgcgat acctgactgt atcaaattac 180
 taaccagcag ggcataaaaag aacctctgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg 240
 tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtcctaa aggcagtgac aggaacaggg 300
 agagagaaag tagtccagta tcacaggctg ggggggatcc actagtctta gagcggccgc 360
 caccgcggtg gagtccaat tcncctata gtgagtcgta ttacgcgcgc tctactggccg 420
 tcgttttaca acgtcnnnac tgggaaaacc ctggcggtac ccaacttaat tcgccttgca 480
 gcacatcccc ctttcnncag ctggcgtnat anngaanaagg cccgcaccga tcgccctttc 540
 caacagttgc ncaacctnaa tggccgaang gaaatttgta agccttnata ttttggttaa 600
 aattnn 606

<210> 336
 <211> 316
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 36
 <223> n = A,T,C or G

<400> 336
 gaacagaaga acacaccctg ccagcagaga gctcangttc ctacagactg acgcagtgtc 60
 actcatccac tgtgcacaca cacacacacc gacacacacc cagcctcctt ttgcatgccg 120
 tgtttctaga gatatgcatt caacatttca tgtacacaca taaacaagtc gttgacacac 180
 acacacacac acacacacac tctcatgtat acagtgagat aactctttc tcttttgaat 240
 tagtgaatgag ggactgagct gctgaattat gcaggagaca caaagagaga aagttgctga 300
 aactacacat ggtttt 316

<210> 337
 <211> 802
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 17, 566, 624, 627, 656, 682, 693, 737, 742, 751, 758, 775,
 776, 786, 790, 793
 <223> n = A,T,C or G

<400> 337
 tttgaatgcc cttccangcc cccctcgag gtcgacggta tcgataagct tgatatcgaa 60
 ttctgcagc ccacattatc caatgcacag gtgtggaaaa agagcagcaa tgtgcacaga 120

```

cactgatgat gttacactgt cagtaaaaac atcagtaggc ttaactctga aggaacactg 180
acacagcaaa attgcatcag tggttaatccc atcttaatca caacataata ctaatgatgg 240
tgcaggctta cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca 300
cacacacaca cacacacact cttttaatgc catcagtggg tgctgcacat cttctgcagg 360
taaaatttct tgttcttctc tgaaacggct gtagcagaat ttattttatt gtagctgctg 420
tgatagcttt acagcaatca cagcagcaga cagtgactcc actgctgttc gtgcagatat 480
gcaaaactaa agcctcggtc aacaggcaca tgtgaacacc tgctcttagc tcagctctgc 540
tctctgctgc atgtgaaggg tcagtnngtg tgaacatgtg gtgcttggtg gggggggggg 600
atccactatt ttctagaagc gggncgnccc cgggggtgga gctccaattc gccctntagg 660
ggagttcgta ttacgcgcgc tnactgggcg gngtttaca acggtcgtga ctgggaaaac 720
cttggcgtta ccccaantta antcgccttt nagcaaaant cccctttttg ccagnntggg 780
gtaatngcgn aanaggcccc ct 802

```

<210> 338

<211> 584

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 36, 490, 528, 546, 562, 578, 583, 584

<223> n = A,T,C or G

<400> 338

```

acctggcaaa caacacacta aggttggaca actggncgaa tttatcgacc atcgatcata 60
gactgagcct ttcaccgatt gtttttacia gagcgattta ttcattttcc cattagtaag 120
tctgctaata atgttgggtg aagctaagag aagcagtcca cacacacaca cacacacaca 180
cacacacaca cacacacaca cacacacacc cctttttcca gctgtgagca aatgcatgct 240
cttcagagtg cgacaaatga ctccttttcc atggtatgaa acaacatcat ttccttgaca 300
gatatttaga atagccagag tgcacagtgt ccacctgggg ctgtcttttt catatttaac 360
catttttagt aaatcacttt ggatattctg ctggtgaaaa gctttttccg agcttgtaac 420
tcaaaaagtc accaaaagtc acctgcatga atatattgct atcgtcattt attgggactg 480
atgaatgtcn gtttggaata aatttttagt ttttcacccc aaccttttnt accgcaccca 540
aagtnttggg atttagtaat tntaaaacct ctttaccnag gann 584

```

<210> 339

<211> 351

<212> DNA

<213> *Oreochromis niloticus*

<400> 339

```

atccattgta aactttctat aaactctgta aacattgatt caaatatagg ctgtaatggg 60
aagctgcgtt gtctgtagca gcggcattca cagcatctct agcataagca tgaagcttag 120
tcacatacca gtaatgcatg taggctgcat aatggcgctca gcatatgtta tgcttccaca 180
tccttgaaca tcctatacac acacacacac acacacacac acacacacaa cacacacaca 240
cacacacaca cacaccccaa cacacacaca cacacacaag actactcagc agcacatgtg 300
ctgccacttt tcccacaggg ctctgtagaa ataactacaa acacatattg t 351

```

<210> 340

<211> 794

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 5, 6, 7, 8, 9, 11, 15, 25, 34, 598, 658, 669, 776, 786, 794

<223> n = A,T,C or G

<400> 340

```

gtttnnnnnt ntgtnaatct tttgnccgtg gccncggccc gctctagaac tagtggatcc 60
ccccctgct ggacacatag atgaagtctc aaacatttat ttgcaagggg ggggaagttga 120
gtgctgaatt atgggtaatt agtttgggtcc aaaatggatg cacagtgtgg tgtaacatct 180
aaatctccac gcagtccctg gctctctctc tctcatttag ctgtggtgta gaacacagct 240
ttgaatttca tttcaggctg tggaattatt tacagacaac acacttcctc atagttgtga 300
ttgacattaa agaaaatcaa tcagtgtaat gacggggagt tttaatctac tgagggcagc 360
gatggatctg aagcagctgc tcacacacac acacacacac acacacacac acacacacac 420
acacagtcag taaatgggta ttttaatacc tgttgatctg taattttgaa cctgctccgg 480
agcagatttg tggagcaatt acaccgtcca tggggctgca ggaattcgat atcaagctta 540
tcgataccgt cgacctcgag ggggggcccg gtaccagct tttggccct ttagtgangg 600
ttaattgcgc gcttggcgta atcatggtca tagctggttc ctgggtgaaa ttggtatncg 660
tcacaattnc ccacaacatc gaagccggaa gcataaagtg taaagcctgg ggtgcctaata 720
gagggtgagct aacttacatt aattgcgttg cgctactggc ccgttttcca atcggnaacc 780
tgtcgngcca cttt

```

<210> 341

<211> 789

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 2, 3, 4, 5, 16, 19, 25, 33, 40, 653, 662, 665, 667, 683,
705, 712, 736, 740, 773

<223> n = A,T,C or G

<400> 341

```

tnnnnttttt gactangtna ttgcnctttg aangcggccn cggccgctct agaactagtg 60
gatccccat cgcgtcagca ggacaggcag ccatttctgg agctcgtcct atcttttagaa 120
cagaaaactgt gctgataaca gagcttccac agcagctaaa tacacagctt atcccacaac 180
acacacacac acacacacac acacacacac actagtgtta catgtgtagg ctgttttttc 240
cccacatgca aatagcggggc tggtttcggg aggcgattca ctttcaacat catttagctg 300
cctgactgac cagtgagggg gctgcaggaa ttcgatatca agcttatcga taccgtcgac 360
ctcgaggggg ggcccgttac ccagcttttg ttcccttttag tgaggggttaa ttgcgcgctt 420
ggcgtaata tggatcatagc tgtttcctgt gtgaaattgt tatccgctca caattccaca 480
caacatacga gccggaagca taaagtgtaa agcctggggg gcctaataag tgagctaact 540
cacattaatt gcgttgcgct cactgcccgc tttcagtcgg gaaacctgtc gtgccagctg 600
cattaatgaa tcggccaacg cgcggggaga ggcggtttgc gtattgggag ctntttcgct 660
tnctngntta attgactcgc tnggctcggc cgttcggctg cggcnagcgg tntagcttac 720
tcaaaggcgg gaaacngttt ttcacagaat caggggatac ccaggaaaag acntttttgag 780
ccaaaggcc

```

<210> 342

<211> 345

<212> DNA

<213> *Oreochromis niloticus*

<400> 342

```

tatttacaca gccaggagac aaatagaaac atcatcattt atcagttttc tgggtctaata 60
agaaacacac acacacacac acacacacac acacacacac acacacacac acacacacac 120
acacacacac agagtaattg ctttaaaaaa gttcttaaat ctgaatagta tgttggagat 180
gtatgtaaat gaggcaactt ggactaacag tgcaaaacag gacagtcatt tctgtggaaa 240
taagcttcag ggatttcctt gctggctctc ggatgggcta aaaatcagct tgcgtgtgac 300
tttaattggag tgcagctctc acacagtaaa gccccgaagc agtaa

```

<210> 343
 <211> 441
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 285
 <223> n = A,T,C or G

<400> 343
 gccatcccgc ctccacacac acacacacac acacatacac acacacacac acacacacac 60
 acacacacac acacatgctg cgaggtaacg gcagacaggg gcgtgactca ttaggcattc 120
 gtccccccagg gagatcgctg gggggggcgcg tgcgagggag agagagcgcc gcagctgcag 180
 gaatgtcacg ggcgggttct gctctgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgct 240
 tgctaattgct gggtggagcc aacggcgggg cactgcacct ttcangaaat aacgcatgga 300
 gaaagggggag gaaaaaaaagg gaaaaaaaaca tacttattag ttctcttttc caccaagtgc 360
 ttattttaaaa gtctaaaatg aatttagaga gaaaacatta gattgcctta taattttctgc 420
 ttttaattaga atgcttttgc t 441

<210> 344
 <211> 653
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 33, 82, 111, 596, 624
 <223> n = A,T,C or G

<400> 344
 tttgatgcct ttggaaccac cgcggtgggt tgncgctcta gacctagtgg atcccccca 60
 tggacaccag aacaggaaaag tnatgaacac acacacacat ctacacacac nctgactcag 120
 catgaagtga tacacacaca tgaacacatg tgaactcggt gactgagtga gaaatgacac 180
 acacacctac accgaaatgg tgattcattg agaagtgatc cacacacaaa atacacatgc 240
 agacgctcgt gcaatgaaga gtaatgcaca cacacatgct cgtgcaatga agaattgcttt 300
 gctaacaaat gcttatgctg atatgcaaaa tgctgcatac acacacacac acacacacac 360
 acacacacac agactctggt acaagaagcc attgattaca cagaacgcat tttatgtcat 420
 ccagaggggca cattatgtgg gctgcaggaa ttcgatatca agcttatcga taccgtcgac 480
 ctcgagggggg ggccccggta cccagctttt tggtcccttt tagtggaggg gttaattgcg 540
 cgcttggggcg taatcatggt cataagctgt ttcccttggg tgaaaattgg ttattnccgc 600
 ttcacaattt ccacacaaca taengagccc ggaagcattt aaaaggtgta aaa 653

<210> 345
 <211> 284
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 345
 atctggacca acaaccatat tcaaagtcaa tgaaatcaac tttcttctc attctgatgc 60
 aactctcagt ttgaagttca gcatgttgtc tggatcttgt ctagatgact acggaaaagt 120
 tgaaaagtat acctaatata gtgtctggtg atgatttgca cacacacaca cacacacaca 180
 cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca 240
 cacacaagtg atcagtggac ctaagaacag accacagcaa caaa 284

<210> 346
 <211> 609

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 3, 24, 27, 33, 49, 73, 357, 570, 593, 608

<223> n = A,T,C or G

<400> 346

```
atnttgtaac atgaaaagat ttanaangaa ctnccccgcg tacttgggna aaaacccccca 60
ggggatcccc ccnggagtgca gttactgcac agtttttttg caagttgaga ggctactgtt 120
aaacctaacc acacacacac cacacacaca cacacacgca cacgcacaca cacacacaca 180
cacacacacc acacacaata agagcagaag catgtgttcc tgagcattgc agatatgtac 240
tggtaaacat gccaaactaag gttgtgggtt gttttcacat tggctctgtg tgcataaagg 300
cgttttaatg acagcttttg ggctgcagga attcgatatc aagcttatcg ataccgncga 360
cctcgagggg gggcccggtt cccagctttt gttcccttta gtgagggtta attgcgcgct 420
tggcgtaatc atggcataag ctgtttcctg tgtgaaattg ttatccgctc acaattccac 480
acaacatacg agccggaagc ataaagttaa agcctggggt gcctaataag tgagctaact 540
cacattaatt gcgttgcgct cactgcccgn tttccagtcg ggaaacctgg cgngccagct 600
gcattaana 609
```

<210> 347

<211> 617

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 6, 7, 9, 11, 12, 17, 20, 23, 27, 28, 29, 31, 32, 36, 44

<223> n = A,T,C or G

<400> 347

```
agggtnntna nnttatnttn tanttgnnnt nnaatntgat gccnccccct ttcgaggtcg 60
acggatcga taagcttgat atcgaattcc tgcagcccc gacattgtcg gtggacatta 120
acgccacact gtgcagtagt gaccttgaat taatttacag cacgatgctg ctgagccaag 180
acctcattca cacacacaca cacacacaca cacacacaca cacaaaaacg caaaacatcg 240
gcagcattgt ttccttcaga aaatgaggtc acgttaaact acttccagtg ccatatatgg 300
gcaaaaacat catccaatac acacacagca gagtttacag aacacaccag tttgttatc 360
aaataaaaaga tcaactgtga taagtcctaa gtgtctaatt tattagaaat gttcaaaacg 420
gagacaatta aatcgcatct tttgtgttta caatgtgaca acacaaacac cacttttgtc 480
tgcgtttgcc tggtccttta ggctcaggca gcagcattat gttggtcttg tttgcttctt 540
tcagctttgc ttccccagtc ttatccagtc catcatcctt tttccaacac gagccatctc 600
cctagcagcc aagccag 617
```

<210> 348

<211> 588

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 102, 469, 472, 492, 498, 507, 517, 526, 531, 547, 558, 561, 582, 585

<223> n = A,T,C or G

<400> 348

```
ttgatccctt gctcccgggt ggcggccgct ctagaactag tggatcccc cccacctcgg 60
```

```

ctcagcttag cccggcgcac tgcttttagc acacggcatt tncacgtgca tgtccctgcc 120
acataccatg gcgtgcacgt caacacacca gcgcacacac acactctaca tggcagtggt 180
atctactgag atgtatatat acattcacag gactgattac agccgctaag aagtgtatct 240
caaaactgtaa ataattcaac atagacaagc agcttggctc tgacctcaca cttgactcag 300
cagaaacaca cacacacaca cacacacaag caaactgtag gttcagctaa tggatgttta 360
caactgttca tttgtggatt agctgcttgt gcatgcagca ttttcgtctg caagaaggag 420
aaaagtgggc tgcaggaatt cgatatcaaa gcttatcgat accgtcganc tngaaagggg 480
gggcccgggt ancccagntt tttggtncce ttttaagngag gggttnaatt nccccgcttt 540
ggccgtnatt caatgggnca ntaggcttgg tttccctggg gnggnaag 588

```

<210> 349

<211> 610

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 3, 5, 9, 11, 14, 15, 20, 28, 39, 59, 62, 101, 102, 130

<223> n = A,T,C or G

<400> 349

```

ttntntttnt ntcnngtagt ttctcacncc attggccent cttttttggg ttaaggtanc 60
cnataagctt gatatcgaat tcctgcagcc caaatcttac nntgagatca tcccataaaa 120
aggctttctn tctctctctc tctctccctc tctctctgtc acacacacac acacacacac 180
acacacacac acacacacac acacaagatc caatagttgg gttgcagtca cgtgggtctg 240
atgacgtgag gaggcagcgc gattttttgag tggagggcgg aagtaaaccat ggaggacact 300
gtggagagtc aggagagcag ctattgtgca acttttagacc ccgtttctcg ggagagatat 360
aaacagatag ttaaaaaata tatcggacgt gatccgtatt ctttgaaaat gtccgaatac 420
accacagcag taaaggattt gcctactatc gaggtgtggg atgggggatc cactagttct 480
agagcggccg ccaccgcggt ggagctccaa ttcgccttat agtgagtcgt attacgcgcg 540
ctcactggcc cgtcgtttta caacgtcgtg actgggaaaa ccctggcggt acccaactta 600
atcgccttgc

```

<210> 350

<211> 537

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 3, 7, 17, 20, 21, 22, 23, 35, 40, 83, 86, 456, 463, 471, 489, 510, 533

<223> n = A,T,C or G

<400> 350

```

ttntatnttc atgtgantcn nmntctcccc cgcgntggcn gccgctctag aactagtgga 60
tccccacca gcagaataag gtnggntcac catacagtct tagtgacagc tgagtattga 120
aaaggctgct tgcagaagag aggtgcctct gtttgtgtgt gtgtgtgtgt gtgtgtgtgt 180
gtttgtgttt gtgtgcctat gagaagaaga gagagacaag acacaacaaa aaagaatagg 240
agatagtctg ttgccctcag acacatcttt gcactccaag gcatcacact ggggtgtgtg 300
gtttgtgagg ttctgcatat tttgagcact ttttgagcaa gatttaatta aattaaatta 360
aatttaattc aatttttatt atatagcgcc aaatcccaac aacagtcact tcaaggcgcg 420
ttatattgta aggtagaccc tacagtaata catacnaaga aanacccaac natcatatga 480
ccctgagcng gcacttttgg tgacagtggg aaggaaaaac tctccttcaa cangaaa 537

```

<210> 351

<211> 836

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 5, 6, 7, 8, 15, 21, 30, 37, 44, 46, 513, 580, 645, 659,
660, 665, 666, 668, 670, 677, 696, 705, 768, 769, 774, 787, 789, 795,
803, 806, 809, 815, 827, 833

<223> n = A,T,C or G

<400> 351

```

ttgtnnnncc tcgtnaatgc ncttttgaan gcggccnccg ccgntntaga actagtggat 60
cccccccaat tgatgaagag gtaacaccag agtagaggct attacagaag tcgaggcgag 120
atgagatgaa gccatgggtc gctgtgatat atgccacaca cacacacaca caaacacaca 180
cacacacaca cacacacaca cacacacaca cacacacacc gttattgctc acgatcacgt 240
tttttattta taataacaat gcaccgtgac agctcgtccc ggtccagcca gcctccact 300
cgactctgcc gtcactatat agacacacag aaggaagaca ctcatgacac aatcgccacc 360
acctgtggct cacctgcctc ccggtgggct gcaggaattc gatatcaagc ttatcgatac 420
cgtcgacctc gagggggggc ccggtaccca gcttttgctc cctttagtga gggttaattg 480
cgcgcttggc gtaatcatgg tcatagctgg ttncgtgtg aaattgttat ccgctcacia 540
tttcacacaa catacgagcc ggaagcataa agtgtaaagn ctgggggtggc ctaatgagtg 600
agcttactac attaatggc gttgcgctca ctggccgctt ttcangtcgg ggaaacttnn 660
tcgtnnncan gttgcantta ttgaattcgg ccaacncccc ggganaggcc ggtttccgtt 720
ttgggcgctt tttccgcttc ttggttaatt gacttgcttg cgcttggnnc cttncggttg 780
gggcgancng gtatnaagct tanttnaang gcggnaatat cgggttntca canaat 836

```

<210> 352

<211> 562

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 405, 435, 465, 485, 503, 532

<223> n = A,T,C or G

<400> 352

```

atattgtgtg aggggggtgtc ttctgtgtgt catgctgtgc tggcaatatt gcaaaagaca 60
tgctcagggtg tgcgttcaag tgtgtgtgtg tgtgtgtgtg cgtgtgtgtg tgtaagacag 120
agagagataa ggatctttgt ctatttccgc acctgcttaa agagttgtgg gaccgtgatc 180
tgattggcgt ctccctgaaca gggacttctg gtatggacgg aggctcagtg accggcgtct 240
gttcctgtga taacagggga ggggaaatgt gaaacaccag catactgaat gacaagagag 300
tgggggatcc actagttcta gagcgccgc caccgcggtg gagctccaat tcgccctata 360
gtgagtcgta ttacgcgcgc tcaactggccg tcgttttaca acgtncgtga ctgggaaaac 420
cctggcgta cccancttaa tcgccttgca gcacattccc ctttngccag ctggcgtaaa 480
tagcnaaaaa gccccgcacc ggntcgccct ttccaacagt ttctccatcc tnaaatggcc 540
gaatggaaat ttgtaagccg tt

```

<210> 353

<211> 611

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 3, 4, 5, 6, 8, 9, 10, 11, 12, 15, 16, 20, 22, 29, 31, 33,

40, 43, 49, 63, 67, 71, 91, 108, 109, 135, 347, 534, 546, 554, 578, 582, 595, 608, 611

<223> n = A,T,C or G

<400> 353

```

ggnnnnngnnn nntannnttn tnttcctant ntngaagatn tanaggganc cctcgtttct 60
ttngggnaac naccctatcg ataagctgga ngtcgaattc ctgcagcnnn tttgtgtgtg 120
gtctgagtgg ttccnggggg ggaggagtga accagtctca gacacttcag actgcagtct 180
ctctctctct ctcacacaca cacacacaca cacacacaca cacacacaca cacacacaca 240
cacacacaca caagcagggg tggacgcacg cacacacatg cacacacacg cacacacaca 300
cacacacaca cacatgcaca cagtgatgag tgcaaagagg gagaggncca ataaacaagg 360
gggggatcca ctagttctag agcggccgcc accgcggtgg agctccaatt cgccctatag 420
tgagtcgtat tacgcgcgct cactggccgt cgttttataa cgtcgtgact gggaaaaccc 480
tggcgttacc caacttaatc gccttgacgc acatccccct ttcgccagct ggcngtaata 540
gcgaanaggc ccgnaccgat cggcctttcc aaacaagntg cncaacctga atggnaaatg 600
gaaaatgnaa n 611

```

<210> 354

<211> 304

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 304

<223> n = A,T,C or G

<400> 354

```

tggatgtact gtcctatgtc agtgaaggac tctggcaacc cactaatgca gctggatttg 60
cattgagtga aatgaagcga aagttttaaa tggcatcagt cttgctatta aagcaaagca 120
aaacatcaga caaacagggg ggagcagctc tctcctctat ccgtgtgtgt gtgtgtgtgt 180
gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtatgtgt gtgtagtaac tgggggagtg 240
ctgtcccttg cctctgtcga gtgtgtgcag cagctgcagc tttcagcctc ggtctatact 300
gtan 304

```

<210> 355

<211> 180

<212> DNA

<213> *Oreochromis niloticus*

<400> 355

```

aggcttgaat gatggtctta aagggggcag tatataacct gtgtgtcttt atcattatat 60
gtgtgtgtgt gtgtgtgtgt gtgtgtttcc tggagagcaa aggctgtgaa tgaactccta 120
aatcacacta ttgatcagcc cttcctccca gacacacgct gggatcgagg gcagttaaata 180

```

<210> 356

<211> 660

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 2, 3, 4, 5, 7, 8, 10, 11, 12, 15, 16, 20, 21, 22, 23, 24, 25, 38, 652, 658

<223> n = A,T,C or G

```

<400> 356
gnnnntnnntn nnttnnttgn nnnnttccgt tgggagcncc ccgcggtggc ggccgctcta 60
gaactagtgg atccccaca atgatagcag tgggaattatc taacacacag atacacacgt 120
aacagccaca gaccctaac atgcttatct aagtggcgat attacagtaa tacattataa 180
tcacactctt tgatcactct atctgggaca cctgctgcac tttgggggat gcagaactgc 240
tttgtctgca gatataatac cataacacac acacacacac acacacacac acacacacac 300
acacacacac acacacacac acacactcta tatgacaacc aaattttccc ctcacaaccg 360
taatggaaca aacggcagag ctattagatt agcaggacat gtaacaacac aataaactgg 420
gagcacacct gaggtggat gcagtgtgag tgggctgcag gaattcgata tcaagcttat 480
cgataccgtc gacctcgagg gggggcccg taccagctt ttgttccctt tagtgagggg 540
ttaattgcgc ctttgggagc taatcatggc atagctgttt cctgtgtgaa aattgttatc 600
cgctcacaat ttcacacaac atacgagccg gaagcttaaa gtgtaaagcc tngggtgnct 660

```

```

<210> 357
<211> 545
<212> DNA
<213> Oreochromis niloticus

```

```

<220>
<221> misc_feature
<222> 2
<223> n = A,T,C or G

```

```

<400> 357
tntttgactc cttggaactc cccgcggtgg cggccgctct agaactagt gatccccac 60
ttgagtcaat tccctgtgaa ttaacataaa tgtggtgatt cgccaacata agcagctgtg 120
ttatgactga tgtgaataca gtggaagggt ctggaaaagc agatgcacag ctatgagctg 180
ctgcattgct gctagtcagg agctgtcagg aaaagactag aagcagggtcc cagatgggaa 240
cgcattgtgaa cacaagtag agctttgcat gctcagcaaa ccttcttaag ataaatacaa 300
ttgtgtgtgt gtgtgtgtgt gtgtgtttga gtgctggagg ggtctttcac agttccttgg 360
aataagcctg ttcttgcggt gtgaggtgac agctaaacat aaatcatgca ttaggctttc 420
ttagaggaga acttggtttc gaacatatca gcttgaattt cggacccgcg tgggctgcag 480
ggaattcgat atcaagctta tcgatacccg tcgacctcga gggggggccc cgggtcccag 540
ctttt 545

```

```

<210> 358
<211> 630
<212> DNA
<213> Oreochromis niloticus

```

```

<220>
<221> misc_feature
<222> 3, 4, 561, 615
<223> n = A,T,C or G

```

```

<400> 358
tgnntttgac aaccttgggt accgggcccc cctcagaggt cgacggtatc gataagcttg 60
atatcgaatt cctgcagccc aaagcgacag gtgcacgctc agcctcacgc ccacacactc 120
catataagga cacaggcgca ccgggctgtc acagcaggaa atcaggaggg tttgaactgt 180
cagaggggaa agtggaaaag cttaaacagt ggagctggaa taggctctgc ccccatcacc 240
ctgattacct gttggacttt gctcaggtgt attaaagcag ctggacagat gttagagatt 300
atctctgttt tgactgaaag ctgctcgta gacacacaca gaccgtaaca cacacacaca 360
cacacacaca cacacacaca cacacacaca cacacacaca gtgtgtatca aattcactgt 420
ttacaaacca tgaatgactc ataccaaaat catcaatatg atcaataaca ctgatgatta 480
ttatcactgt gatcattact gctacgcgtg ttgtgacgca ccagcaccag tgggggatcc 540
actagttcta gagcggggccg ncaccggggg tggagctcca attcgcccct ataggagtc 600

```

gtattacgcg cgctnaatgg ccgtcgttta

630

<210> 359

<211> 607

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 6, 8, 601

<223> n = A,T,C or G

<400> 359

```

tttganancg ttgggtaccg ggccccccct cgagggtcgac ggtatcgata agcttgatat 60
cgaattcctg cagcccccat gttgacaaac caggattcat gcttttcaag actgtctgtc 120
catccgtgcc aaggaccccc ccatagaggc atagagctac agccaccatg accctgttcc 180
acacacacgc acgcatacac acacacacac acacacacac acacacacac acacacacac 240
acacacacac acacacacac gcctctctca tctgtccttt cacatgtaac ccagcagaac 300
aaaagcaaag gactggaaac acattttccc gtccttatga gcacttcact tcctgtgtgc 360
atatgtctgt ttacatatca ctctgcccct tcatccaaca cgcttacaca aaaatgcac 420
acccatttgt cccctacttt ttagcccatg cttgtctgta aatataatg tatgcagctt 480
cttttttcat taggatcaga gtgcaggagc ccaggaacag gtccaagaac tgaaacataa 540
ggagattgga aagaaagcgt tgtgaaattt ggagggaacc ttcagctttt cacgctgctg 600
ngatgga                                           607

```

<210> 360

<211> 542

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 440, 491

<223> n = A,T,C or G

<400> 360

```

tttgtgccag tgaagcatgt aggtgcatgc ttgtgtgtgt ctgtgtgtat atcgatgtct 60
taggagagac gttaatgtcc tgggagcaga ccgtcacttt ggtgagagta aatataccta 120
aaagcgccct gagagcaaca ggactcttct ctactgaca caatattatt ctgctgttct 180
tcacaagctc tggggaaact gtacacacac acacacacac acacacacac acacacacac 240
actttctctc tctctatccc accaggcttg tttatgagtg tgattacaca gagagaggtc 300
cggttgcca gctcacctga gagcgcatca ggtgcagtgc cctggggcct tgtgcctgtt 360
tgtgtttgga cagtgtgtg tatttttgga acggcacact ttttgtgcct gacagtgtgt 420
tttttggttt tgtttcctgn tttattcctt ctgttactgt gtgaaaaaga gatatagtgt 480
ttgtttaagg ngtcccatgt tgggttagat gccccaaact tctgggggtcc taaaattcaa 540
cc                                           542

```

<210> 361

<211> 270

<212> DNA

<213> *Oreochromis niloticus*

<400> 361

```

tgcagctgac cttcactctt atctcactta tggctgctaa catgcctgat ggatgtttcc 60
ttattgtttg tacagactga cccgtgtgga atctgtttac aagacttgtg tgtatatatg 120
tgtgtgtgtg tgtgtgtgtg ttaggggggg tctgggcttt catgctgtct gtcagttgt 180
atccccact actgaaaaaa aaccacacac acgatactga aatgttccta taactgggat 240

```

tttagagaaa ttgaaacagc atattagtct

270

<210> 362

<211> 601

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 4, 5, 7, 8, 9, 10, 11, 14, 22, 23, 26, 27, 32, 35, 40, 42,
50, 54, 59, 80, 83, 84, 105, 128, 133, 383, 435, 462, 538, 545, 548, 569,
572, 573, 574, 576, 579, 598, 600, 601

<223> n = A,T,C or G

<400> 362

```

aggnngnnnn nagnttatct tnnatnnggg gnttnaaggn anccttcccn ctantgggna 60
acgaccctat cgataagctn ganntcgaat tctgcagcc cattnaccat caaacagaca 120
cttcattngg ggngcagtga taacaaatac attgtgtagg ataatgatgg cagtgggttca 180
tattgttcat tatacgtctg ggtgtcatac ggcacttgca aatttatacg tctgtgggtg 240
cttgtgtgtg tgtgtgtgtg tgtgtgtgtg tgcgtgtgtg tgtgtgtgtg tgcgcgtgtg 300
tctttgtttt tgtcattttc atgtttcagc aaattaacgt ctgaaccatt gggaagaaaa 360
atataccatc atttgccatt ggngacaaac aatataatttt ggataatgat tgcattctatt 420
ggcttctgca tttgnaaatg tgaggtaatg aatttccttt gngagcaatg aaagcaaaca 480
gacatattat gtcactttgc ttgaacaggg ggggatccac tagttctaga gcggccgnca 540
cccngngngg actccaattc ccctatagng annnctant acgccgctca ctggcccn 600
n 601

```

<210> 363

<211> 664

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 2, 3, 14, 19, 460, 565, 582, 592, 617, 637, 645, 654, 655,
664

<223> n = A,T,C or G

<400> 363

```

tnntttgatc cgtnaatcnc tttgaaccgg cccctccctt taggtcgacg gtctcgataa 60
gcttgatatac gaattcctgc agcccactgc tatccattga cagatattga gttttccctt 120
catgttgctg ccatcacctc ttgcttatca tgctcactct tttgcagcta taatagcagt 180
atgtcactgg ctaccatgta tgcacacaca cattatacag tgacatatac acattaatcc 240
ataagatatg ctaattgatt atataaaaaga catagtcttt ccttcgtgtg tgcacacatg 300
cacacacaca cacacacaca cacacacaca cacacacaca cacactaaaa catgcacaca 360
taacctctgc cctaactcac agtggtcttt gtctctaata gctgctaact catttagcac 420
ttcatgttag agagagagtg gagtctgagt aggagggggg ggatccacta gttctagagc 480
ggccgccacc gcggtggagc tccaattcgc ctttatagtg agtcggtatt acgcgcgctc 540
actgggcccgt ctgttttaca acgtngtgac tggggaaaac cntgggcccgt tnccccaact 600
taaattgcct ttggaancac attccccttt tgccagnntg ggcgntaata gccnnaaaag 660
gccn 664

```

<210> 364

<211> 620

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 17, 19, 22, 26, 28, 31,
36, 38, 44, 47, 56, 617, 620

<223> n = A,T,C or G

<400> 364

```

ggnnnnnnnn nancttntnt tnttcnanaa nacttnantg aacnccnccc cctttngagg 60
tcgacgggat cgataagctt gatatcgaat tcctgcagcc cccctcagat caagtttcaa 120
acagccatcc ccgtctttct ccacactcaa acacacacac acacaccctt gtatatatat 180
acacacacac acacacacac acacacaccc ttgtatatat atacacacac acacacacac 240
acacacacac ccttgtatat acacacacac acatttccct tcaagatgca caatcaaacg 300
ggctcacaga aaatatactc cactgaacac cctgtaaaat gtcttttaggc tggagacatg 360
tgggggatcc actagtctta gagcggccgc caccgcggtg gagctccaat tcgccctata 420
gtgagtcgta ttacgcgcgc tcaactggccg tcgttttaca acgtcgtgac tgggaaaacc 480
ctgggcgtta cccaacttaa tcgccttgca gcacatcccc ctttcgccag ctgggcgtaa 540
tagcgaagag gcccgccaccg atcgcccttc caaacagttg cgcagcctga atggcgaatg 600
gaaaatggta agcgttnatn                                     620

```

<210> 365

<211> 142

<212> DNA

<213> *Oreochromis niloticus*

<400> 365

```

aaattagtac tgttacatga agaaaactct gggttaagca cacacacaca cacacacaca 60
cacacacaca cacacacaca cacacacaca cactaccagg ggagttgaga gtcctgcgca 120
gcatctttgc tgttcctacg at                                     142

```

<210> 366

<211> 584

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 17, 24, 43, 81, 383, 407, 427, 440, 584

<223> n = A,T,C or G

<400> 366

```

ttgtcttcatt ccttgcntcc ccgnggtggt cggccgctct acnactagtg gatccccccc 60
ggggtgaaag agatgagtg ntgagcaaga ggaataaaaag acaaagagag caggggaaat 120
agctaattgat gagagaaaagg gaaagagggtg agcattttgat gagactgtat ttctattaaa 180
ctgtcagaga atttgctctt tttctgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg 240
cgcgcgagcg cccttcacag aggcacagta atgtggctga cccaaatgac taggaaaata 300
ttgggagagt gaaagacgga agcctctggt gaatactgat gaagctcagc acaaagcttc 360
ctcctggggg ctgcaggaat tcnatatcaa gcttatcgat accgtcnacc tcgagggggg 420
gcccgnacc cagcttttgn tccctttagt gagggttaat tgcgcgcttg gcgtaatcat 480
ggtcatagct gtttcctgtg tgaaattggt atcccgtca caattccaca caacatacga 540
gcccggaagc ataaagtgtg aagcctgggg tgcctaata gtgn                                     584

```

<210> 367

<211> 497

<212> DNA

<213> *Oreochromis niloticus*

<400> 367

```

ccctcatttt ttgtgtgtctc cagacctctg cccatatttc caccagcttt ttccttttct 60
tgcttcgttg gtgtgtgtgt gtgagtctct tcctcagccc atctgtttgt aactgtgcac 120
gtctgtctgc cttacaccag actaaacaca tacagacaca cagacacaca cacacacacg 180
tacattcagc ttttcattaa atataccagt gacaggatat gacaagctct cccagctttt 240
taatttagcg ccggtgtccg cccacctcct cagagagctg gtctaaaacc tgtcactgcc 300
aacagttgag ggatgacaag gtaattaata gtttcactac aatgcagcca actcttttag 360
gagctggaca gacaggatga gcagaaaaac aaggaagcat gtggagagag gagagattag 420
gaggcagggg atgagcaaaa aatattgaca gacagagcag gaagatgaac agaaatagtc 480
tggtaaacca gacgggg 497

```

<210> 368

<211> 780

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 3, 4, 15, 18, 44, 45, 519, 573, 631, 636, 664, 667, 670,
685, 689, 692, 704, 710, 713, 715, 730, 736, 749, 752, 762, 763

<223> n = A,T,C or G

<400> 368

```

tttnnaagccc ttggnagncc ccctcgaggt tgacggtatc gatnngcttg atatcgaatt 60
cctgcagccc ccttccactg ttgaagctgt cacaggattt gatagaagag catatgattg 120
ctacacctgc acttgcttgc ttttcacttt tcacctcttt agttacatta aaaagtctca 180
gtttgtttgg cttacacaca tgcttgaaaa gacacactta tctcactcac acacacacac 240
acacacacac acacacacac acacacacac acacacacac acacacagac gtctcacctg 300
ttttactagg taaggctcaa aacggatcat ctaagccaat cacccttcag gaagcaggga 360
tcagccaaaa tctcctcaat taatagctaa agtaaccttc agtgacctga ctgtggtcta 420
ccacaaacac acccacactt acacacagac atgcgcgcac ttacacacac actctctctc 480
tattgtcggg ccatttacca ttagtctggg attttttntt attcatttga gtagactta 540
gtattagtaa acatgtgagg aacaggatca agnatgtgag gcacatctat ctatctaaac 600
tgtaaggggtg gactgacctt ttccctacct ntagnngctt agatgaaaag atgaatgcct 660
gtcngngntn aacaccggat tttnttttng gnaacaaaaa ctgntggacn ttntngctgg 720
cagcaaccn tccttngata ggactgaana gnccctgtc tnnaactggg tttttatttg 780

```

<210> 369

<211> 590

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 2, 4, 5, 6, 9, 18, 23, 26, 32, 33, 34, 36, 42, 46, 52, 54,
58, 60, 67, 70, 125, 132, 134, 136, 140, 326, 327, 392, 405, 429, 474,
497, 501, 502, 504, 505, 507, 511, 513, 520, 528, 530, 531, 539, 540, 541, 542,
544, 545, 546, 549, 557

<223> n = A,T,C or G

<221> misc_feature

<222> 561, 562, 563, 564, 565, 566, 567, 579, 583, 587

<223> n = A,T,C or G

<400> 369

```

gnngnnagnt atttgtcnca aanacnaaaa annncncccc anctgngaaa cncnctancn 60
ataagcnggn gatcgaattc ctgcagccca caaaagcacc cagatgttca aacaccgggg 120

```

```

ggacncaaaa anantncacn cacacacaca cacacacaca cacacacaca cacacactga 180
cacacaaaaa gtttcatttg aattcaaacc aaattgactt caggcaaaca aaacgttgct 240
gaaatgatat tttgtgttag aatctaagaa ttcaggaaat atgttataat gaatgaatta 300
tcagcagctt tgatactttc agacgnngta tttgactcgc tctggtaact gaagctaacc 360
tgtgatgcag tttggtttgt tcgcgtgttg tnagttgctt gtgtngtttc tgtttgctt 420
cctccttgnc ttgtgtgggg gatccactag ttctagagcg gccgccaccg cggnggagct 480
ccaattcgcc ctatagnгаа nncnnantac nncgctcan tggcccnncn ntttacaann 540
nncnnnacng ggaaaanccc nnnnnnnaac cccaaactna aanacntgc 590

```

<210> 370

<211> 278

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 69

<223> n = A,T,C or G

<400> 370

```

actgacacac aaaaaaaagc caacggctctg aattgagatg aaaatactgc tgtggaggga 60
gcgacgctna aaataccagg cagggctgca attagtggtg tgtgcgcgga gcagctgctg 120
cggttcagag cactaagtgt ctctaattac tgctgcagag agtgtgtgtg tgtgtgtgtg 180
tgtgtgtatg ctgatattgt cacgcccaac ccatgagggg tgcctctgc tgagtatctc 240
tatttaacat gctctgtgtg tgtgtgagtg tgtgtgta 278

```

<210> 371

<211> 317

<212> DNA

<213> *Oreochromis niloticus*

<400> 371

```

ccatccatga aaccatttga ctctaaagc acactgttaa gtgagaggat gcacttctcc 60
ttgatttaaa tgagcagcgg gtatcagcag tttagctcct gcagagcatg agctccacac 120
acacacacac acacacacac acgcttacac attgtcacat aagagaagtt atctacttgt 180
tgctgtatgg agagctaaag cttctgttat gaaaaatggg ctattatctt cttattgatc 240
acattgttga tgagacaaat ggcggaactg atagatgggg ttttatcacc ttaactgttg 300
tcagtatgaa tatggat 317

```

<210> 372

<211> 421

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 413

<223> n = A,T,C or G

<400> 372

```

atatgttctg gacactcagg tgaagagagg tgctgagctg tcaactgatt accaggtgtt 60
ggtgagatgg atcagctggg ggagaagaat gctggacaga cagacctgat agtaatgggtg 120
cgctaggaat agcaatagta tgctgctttt aattagaaat caatatcaca tgccccccag 180
aaaaggaaac aataattttt ttccacatct taaaggcagg aataaattac cctcaaaaga 240
attacactca gtgaaaatgt tgccttgctg gccaatgtct cttcttcttt tttcttacat 300
tcttacatgc atgaattctc tctctctctc tctcacacac acacacacac acacacacaa 360
gctggagatg aaagcctcat tcaaggtgta actgtgttat aaaaagaaat tanttgagaga 420

```

t

421

<210> 373
 <211> 324
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 8, 167, 246, 269
 <223> n = A,T,C or G

<400> 373
 gacgtctnca ctctacatgg aaaaacacac acttactcta ctcatcacgc tctgttatct 60
 gtcagcaatt actcactgcc tcctaccacac caaaccctc gagaagcatt actttgaaat 120
 gcccagaaac acacacacac acacacacac acacacacac acacagnttt acacattcac 180
 actttcacat ttccacacct gtggagaaaa ccagtttctc tggcatttta tcagcttatt 240
 tgctgntgct atggaaacaa gccttgkana gagagatggg atttgtgtgt gtgtgtgtgt 300
 gtgtgtgtgt gtgtgtgtgt gccc 324

<210> 374
 <211> 567
 <212> DNA
 <213> *Hippoglossus hippoglossus*

<400> 374
 tgacctcatc ttacagtttc agttgtcgag gttacagtga catttatatg agaaaaagta 60
 tgtagagata tgtacacaga aactgcactg gttagcggag tcatacaacc gcagtgcggg 120
 aattctagtt ttgttttttt tataaatggg ttagctattt ttacaatcta caaatagtaa 180
 tcaatacatc ttgtcacagt atgttacaca aagaaattgg cattaaagtt ggcattcttg 240
 tgtctacca gcctgacgat acagctgaaa tctttgctgc ttaatgctca aatagagtc 300
 tcaatggcgt tctgcaagtc attttgattg gttggtcctt gtgaagagga gaataaaatg 360
 aattagtgcc aatatcagtt tacaatcaaa cttttttgtg tagacctgtg gtaaacagag 420
 tcaaaggaca ttgtgcaaca atgacataca ttttttccac agtacctgtc gtccactgct 480
 gaacatctga caccatttac tggactgtgt cttcctgtag agtggtgatg ttctcaaggt 540
 cctttgcaca gtctgtcaaa acaaaat 567

<210> 375
 <211> 695
 <212> DNA
 <213> *Hippoglossus hippoglossus*

<400> 375
 ttggcttcat tgtgttgtct ctatatagag tttatggtcc agatattttt atagcttttg 60
 ttttttactg tctttaacag ttctgctgca gcccgttatc cctccgatca atttttgtta 120
 ctggctttat caggaatgtg acctcacatc cttttttcga ggctgaatgg tgatacattt 180
 aattgagaag aatgtaatg ccgcatgtc tgtttaaaat acatgtagaa tatatacggg 240
 gtgataaaac atgtgtaaca acaccagag gagacacagg gagatgtcca tcaaatccag 300
 tttctaaaag tccacattat ccgtggaggg gtctaacaag gcagcaagtg aaataacgtg 360
 tgggtggttg ttagcagctt aaaagacgaa ctggaaaactt tgtgcttctt catctctgtt 420
 cagaaaaggag caggaaaaaa aatcaattta aaaaaagaaa agaaagcttt gaaatacaaa 480
 ctgtaaaatt tgatttcaaa tagaaaatat tcaataatgg ctgagagtca aattgttctt 540
 taaaaacaca tttggtcaca gcgtcgttct tgtttaatgt ttccatcaac aacactgact 600
 gatttaagat tccacttcaa tccacgtcac cagattcctg ctcacatgta tgaagtctga 660
 caccaaatg tgtacatata taaacaatga cattc 695

<210> 376

<211> 598
 <212> DNA
 <213> Hippoglossus hippoglossus

<400> 376

```

ttattgttgg aggcattcat tgtatgtttt gtttctatgc ttaaatttcc atcgctttac 60
aattaaccct tggctctcaa acttgcttgg gaagggtggca ggaaatgtac cactctccac 120
aggtcaaaatt ccttcatggg cagccgctgc gctacttggg cgcacacaga tggaaaggag 180
cacacctatg gaatatactg atgatgacaa cacatgcgca acatgtttcc ttccaaatgt 240
ggagttatgt ttggtatatt tatgtaaaat aataaagcat ttttcaactg tcatgagggt 300
ctaggatttc tgtcaagaac gttgtgtttg tggctctgtt taatacaaat caatatagt 360
atgggcggcg tgggtggttag cagtgtcgcc ttacagaatg aagggtccca gttaaatctt 420
gattttctag tttttatctg gtactcctct gacagtccaa agacatgcac tctgtgaccg 480
ttggtgagaa tagttttgtt tcattgtcag ctgggtggga ttggctccag ctccccccgt 540
gactctcatt gatggatcga catttccaaa aatgatataa catatgtatt gcagcact 598

```

<210> 377
 <211> 692
 <212> DNA
 <213> Hippoglossus hippoglossus

<400> 377

```

cccaccttgg gcgtcacgtt ctttatactg cagggagaag aggatggaga agttattctg 60
gtccaacact accccatcca gtgggatctg aatttagttt tctcctttta ccaccaggat 120
aacgtgactt gtacactgaa gatatgttag ttctaactcc cataactgta cacactggct 180
gaaaagggca atactgctgc atgccaatct acaacctcac accgcgccag aaagaaagaa 240
agtttgtcac gatcactgtt ttctctccac actgccattt cacgctcagc ctgtttgcc 300
gctgagagct aaatggagcg atttgtgaga gaaaaacagc tgagtccttc cccgccggtc 360
gacttgctgc aggtgtgggg aggaatttgc ctctggaatg tattttctaa ttaaggatta 420
tcaacagccc agcgcctgct gagagcccca gtctggtttt gggcaatcag gaaagcctct 480
ctccatttta ttcacttcaa aaatatctca gtgtcacgct ctgcggttct ctacgggata 540
gaggtagagc tctagtttac atcctgcagc tcagacactc gcaaattcac aatttgctgc 600
gtgttggtgt gctggtagct cagagtctga ccttgaggga gaggttggtg gctgatgttt 660
ggttcataag tgcagtgtgt gaaatctgac tt                                     692

```

<210> 378
 <211> 475
 <212> DNA
 <213> Hippoglossus hippoglossus

<400> 378

```

tatattatgg gacatcctgt gtgaatcaat caatcatcaa tcaatttgtg ctgccacaaa 60
tctgcacaac ttttgtgggg cacaaagtca gctgccgcta aacatctgta acaccaaagg 120
cagctgcctc caaactgtgt ggcatcaaag ccaactaccg ttacatgtca gtgtcacttt 180
ctgttgacac cagaagtacg agctaccgct gccacgattt gagtttgccc ttactagtaa 240
aacgaacgta gcagcctgag ctgccattga cttcaacgtt tgagaagcaa caggaaagt 300
gagcatactg atgtttgtca acgaaaacga gttaatatc acttcaactg caggaaatat 360
tattatactg acattttacg tgtccaagt aatcgtagat gttaaattgt acaatgtctg 420
gaggcagtg tgcagttgag ccgcctttt ttgacttcag tgatgtttgc gtcgg 475

```

<210> 379
 <211> 605
 <212> DNA
 <213> Hippoglossus hippoglossus

<400> 379

```

acatcaagtc tttaccaa at gcctaatttt taaccataac tttatagcaa aacatataca 60

```

```

atagccacaa acttccaggc aaaatgtttg tggtaatgat acatattacg caagcgcaat 120
ttttgtctct ctatatgcta acttttgtct ctcaaatttt ttttttactg ctgctaatta 180
aaggctaata aaagtgggtg gacagactgc aatgttactg taaaatgcta aaagaaaatt 240
gtgtatggtt gcaggtgata actgtgtggg tttgtcccca caagctacaa ttttaacatg 300
acttccacga gcatggacca caccacgact gtgtatcatt tgaatggaaa ttcaggctgt 360
ataggatttt gcggatggat gaatggatgt ggaaggaaaag gatgaagatg gatgaagaat 420
gtctctatca ggctggctct tgaggatatg ccgtggactg ggcagatata gactccgtct 480
cagtaacatt tctgccaat ctgatgtcgg acccccaaaa agtcagattt tatttgagct 540
gggttgactt tgggcttgaa gaatatcgtt gaggttggtg cggatgtagg aaagcattgt 600
tgtga                                           605

```

<210> 380

<211> 870

<212> DNA

<213> Hippoglossus hippoglossus

<400> 380

```

gtgaaaaact aataacttga gtgtaatatg aaaacgtatt cgaggttatt ggtctgatct 60
gtgttcaaat gttcaagttc aataagtctc tctggatgaa tctgttttct tccagcctgt 120
gtgaagttgc ataacggtct gtgtgccctc attaaactgag catgctgaga atgaagcaag 180
tgggtgattta atttcttata ttattaaact tatacctaca gaagtttcat tccaccaaatt 240
atttgtcctt acttgggtca ataaaggcaa aaggggagaa tggatttata atataaacgt 300
gcatctggac ttgtgtctac ttgaaaagaa gatgaagcag gaaatgacct ctctaattta 360
tatgcacatt ataagtgtga tcacatgatc tctggatatg ggaatgagag tatattacta 420
tgcaaaagtaa ataaaacacc agcatagtct gcaatcagct aaattaaaag ctgaatcaat 480
cacataatac aatatattat atttcttga ttttattaga aattggtttt atttaattta 540
ttggattatt tttatatttt aattattttc aacttttgtg tataagtaaa tcatttttaca 600
tgcaatcaga agacttggag acgtattaaa aaaggcagac ataactcatg tcttttagca 660
tcatcaagtc tattcttagt gtctttatct aaagataaaa tctcaaaatg tgccagagga 720
ctgagtgagt tttagggaca aaaggaaaaa cacaacacgc ggacgacgac agtaagtcca 780
ctttggactg cagagaagag agaatttcat ttacagtgcg gcatttaaca attaattgcaa 840
aatataacta gaaacacatg ttgaccgtta                                           870

```

<210> 381

<211> 611

<212> DNA

<213> Hippoglossus hippoglossus

<400> 381

```

attactattt ctctttgtaa caaatacaga agtgttcaat tagtcacaca tacataactg 60
aagaaatact ataaactttg caaagacagt atatattgca gtatagaaca ctcaaaacag 120
caacacacac aagtatttaa aagtgaatc ttattcaata aaagacacca aagaaatata 180
tttaaatat caatgttggt actgtgttac agaaaaccct acatactgca ctacagaaca 240
ggcattttca gcagttgctg gaagctctat ttgcattttg tcaccagagc acaatgaatc 300
ctgggatcac tgctgtagt gtataaaacta tcattttcga gcagctctcc cacgctgtta 360
ttaaaaaggt ggatgaactt cagtcaccca tatacgagac tatatataga ctaggagagc 420
tagagacaac tggaaacta atcatataga ccaatacatt agcattttat tactattatc 480
cttattgtat atatgtactg gcgtgggata aaacaatagt agaattgtaac taagtacatt 540
tactcaatta ctgttttaca atttgaggga ctacattact tgagtgttgc aatttctttt 600
tacttgatac a                                           611

```

<210> 382

<211> 360

<212> DNA

<213> Hippoglossus hippoglossus

<400> 382

```

aaatggcacc aaacggtgtg tgaccgggct gtgtgcattc gtgattatct tcgtcaagtg 60
gtttggacgg tgaccttgtg tccgcagtg tgtgcagcca cgggcgtttt aatgtctcta 120
atgtggcgag cagctgcagt ctgaggcagc acggtgcgtc tgcacatgag tgattgacat 180
gtcagacaag cagcgtgact gaagcgtgtg tgaccttcga gttgcttcaa ccgctttgtc 240
tcgacttttg ctccagatct atctgtgcat tgatcgatct ggatcaaacg aactcactgc 300
tctttctctg cagtccactg ataagtttac cacctgctca agtgtgcttg tgcatttagt 360

```

<210> 383

<211> 1000

<212> DNA

<213> Hippoglossus hippoglossus

<400> 383

```

ggtctcttgc aagtgatata tcaagtctgc atttaaggaa tttcttcaga ttttgacaaa 60
agattaactg atgagatttc agtggtcgaa ggtaaaagtc atggtgacac tatatcattg 120
tgaatgtgat atgtcaggaa cacctggagg gactgaaact ggcatataaac cactggactc 180
tatctaacct agtttaacat tgtgtacatt tgaagtaaata caatcaacat gtctttctgt 240
ctcctccagt tgtcagatct gatcagtggt aagctcctca atgggtacgtc tgccactctc 300
agcttcaggt gcaatgatga gagtggtcaa ctctctcttc ctgtcctgtc tcacatcaac 360
caaccgaagg aaatagttag attatgatta ttttagtagat ttttagattta tgattaaata 420
aaggtcatat gattcatatc atttactctg ttttaacagc tctgcttgca gacagatgga 480
aagtttacct ctaattttgc tcaagacctg ccgctggcga ggaagacaaa atcccctgtt 540
gtggctctgg agaacaagag gaccctgact cctgtaaaac acattttatg ccagtgtgat 600
gtttgagtgc taaagcttgt cttatgctga agttaagggt aggttaagat aggttaggtt 660
aaggtaaggg caaacacaaa tcaattggga aagagactgt aacgcgatgt ctgtataaga 720
gattgtgatt ataactcagcc gtaactgtgt tgaccataga aatgtagatc attcttttaga 780
taatcaggtg ttttcttttc tcgtatagaa ataataaaaa cctttgatc cttcctgaac 840
ttctacaggt tctgcagaca ccttcactga gtcactttgt atagaagatc ttgctaaatg 900
cctcctgttg ttctgcctca tatattctac catgcaagta atgatgtatg gcaggtgtcg 960
gtgggcaccc aggagatgct ccagatggtc agagaggtgg 1000

```

<210> 384

<211> 682

<212> DNA

<213> Hippoglossus hippoglossus

<400> 384

```

cagcgtgtgg gtctattttca gaatcaagat gaagacatta gaacagctgc acccttcagt 60
gggtggtaac atgcaaggcg tcccatacgc tctattgttg cccagggtt accctgtact 120
tgctgctagc atgtacacat aaactaatca taacactaat ctaccatgc tactgtacac 180
ttgtgaaaagc agaccatctg tgcgggcttc ccaattagct gccgtcatat ggcacaggat 240
gggaaaaaga tcggagtcct cgctacacca ctgtacagga gaaaataata aacagcacgc 300
ttgactaatc cgccgttaag ctgcaggatt tcatctgtaa agccccgaag ataaagtgtc 360
gggtcttcct gcacagaaca cgaccattgt gcatcctgtg aatagggtga ttgtcctgta 420
tattatctcc aggatggcac tcgttagaca aatagcttac attgtcttcc aacaaaaaaa 480
acccggtcag gagcatcgat cagggagaca cgccttatca aattacaaca gccaaacaac 540
aggcaacaca atcgtgacga gcaccagggc aataggagca atatcttaga aaccagcaac 600
acaaagaggc tcataagaga tccaatcta tcaagcagac agcggagagt atgcacgtgt 660
ttgcatttgt gtgtcttttac ct 682

```

<210> 385

<211> 797

<212> DNA

<213> Hippoglossus hippoglossus

<400> 385

```

cttgacaatg catcacatat aatataaact aatgaaaagc tcagggctcc acactaactt 60
ttcccattag tagcactggg gctgcctact gaaaatttta ggagccccag cataacattt 120
agagcactgc gtattgtaaa ttgacatgta gataatacac attacatggg attttgccat 180
caaactctgag cagcatcagt gtggctgcac cacgtgtctg aaaaagacat tcgattttcta 240
gtcttgcaag gtgcgttcca aggaaatccc tggagtaaca aggcaaccaa aaacattttca 300
acaccaaga acctcatcac tcatttgatg gttatgacaa gttttcaatg caagctaaaa 360
ttaaagcaac tcaccaactg catttataca aaatgtaaaa aaagttttctt gtcataatat 420
gatagattcg tatcgacaaa taatgtgaaa aacatcttga tataataata aagtgttcac 480
attacaacag gatactcatc tgtttttctt tttctggcat ggcagcaaca tgctcctgca 540
cagttcagta catgtgcttt cctagaaaata gttcacagaa ataactttgt tttaaaagga 600
aggggtcata aagtagtgcg tcaaggtttt tataggttta tcaaataag acatcaaata 660
acagtataag attattacta tcattacagc acaacaacat acccctcctt ctccctccctt 720
cagagcacat ccctctgaac caactcctct ctccctggtaa aggtttgcag acgggacgac 780
acatttagat tcggtat

```

<210> 386

<211> 587

<212> DNA

<213> Hippoglossus hippoglossus

<400> 386

```

ggccagggct agacaatcaa gcattctctg caacaaggag gactttcagt tagcacatta 60
atccagatgt tcttggatta aattgatttg ggttgcaagt aaagacttta gacgttttg 120
tcattttagt ctcgactaat tccaagaaac aagaaatttt agtcaaagcc aaaaatttag 180
atttttggca aacttcagca aactgctttc caattagatt agaaaaaaca ttggcaaacc 240
cagtgcgatt gaattactgg aatgaaagtc aatcacagag taaataacaa aaacaatcag 300
agagtacgtt gaactaaagc ccggtcatga atcctatttt tataatgtct ttgtcaggtc 360
tgtgccaaga ggttggtgat ttcatctat agttgtgtag gtttggtggt ggtaagtgtt 420
gaactagatt gtgttacaca ataagcagta ggcagatagt cgagctgaga caattaacac 480
atatgttaaa gttaataacg gcgtaaagca tcgtgatgtg tcgagctgct gtcagacatt 540
tcttaccctg ttctgcaaat gagcaagaag acatcatggt catagct

```

<210> 387

<211> 584

<212> DNA

<213> Hippoglossus hippoglossus

<400> 387

```

gtattattat taatctaaag cacattgaca ttgtcgtcta aatcccagga gaagtatttc 60
actaaaataa agaactctct aaagactcgt catctaaata caaagatcaa tcagtttgag 120
agataaagaa ttacaagtcg acagatgaaa caatttgctc atttaggggg aaaacaagt 180
tttttatcca cttttccttc gtcgaacgtg ttcatataaaa ggggagaaaa ctgtcagcaa 240
agcacaaaac gtcacttagc agacttgaag ccaattttcta cgggtataa tagcagtaca 300
aatgcagtgt cttgtatttt ctttctttga gaatgcttta attgcatatg tagctgcagc 360
gttatgcttg agactgaaa aaagggttatg attcccaatt aggatgagga ttagttgcca 420
tggagacagc tgctccaga ttccacagta acacaaaact aatttacgga gccggagctt 480
gatataaaaa ccaaatttca ttttcaaaat gaggcatac ttccactca cattggtaca 540
cacgtgtatc gcaaagttca ctcgagatct ggcaagtgtt acat

```

<210> 388

<211> 525

<212> DNA

<213> Hippoglossus hippoglossus

<400> 388

```

ctacaacttt aatcttacca gacttagttc ttgctactga aactgaggaa tacatgagca 60
aaaataaaat ctacttttga tattctttcc taaattggca aaatcagtac aagaagctaa 120

```

```

atcttttaaaa caccgagttcg aaatggcaaa taatttttaa catgtatcag atccaattca 180
acttttaaaaa aaatccttggg taaatggtaa tgatatggaa ccaggaatgt ctctcgaagt 240
atctgcaaaa tgcacaaaat aaaccacaat cagctgtaaa tatttggtcg ttaaccttct 300
gagagggtttc ccttttcttc ttatcttctt tcttcttttt cttgtcttcc atgaactact 360
gttccctttc tggattctcc tgtctgggt agagaaaagt acacgttcag ttattgcaac 420
acctcaagtc gtacggaaaa gcaacgcaat gcacgcacac aaatagataa tgtgcacttc 480
atccgaccag tgccaagttt tactcctaca cagtcagagt tgtaa 525

```

<210> 389

<211> 465

<212> DNA

<213> Hippoglossus hippoglossus

<400> 389

```

ccacgcccc aaatattgac tgttgctgta gcagcggtag ctaccatggg ttcttttgac 60
ttaatgtgac tctgcaccgc actgatttaa cgtgatgcat gctgggttaga aattttgtct 120
gacttttacc agcgtgcaaa aacatcacca tgtcacatga ccttaaaata ttgtgggagc 180
gagtcagctg caatcagacc gtgcagttgt tctccttcag ctgcagaacc tgggaaccac 240
agtctatgga accagccctg tgacaacata actttgtcct gattggctga acacatgaag 300
aatcttacgt tatattctta cacattcaga acaactacct gctgcctatt tttctccaaa 360
gaggatgaga tgtctttaat ctctacctga caattttcta tttacacttt acagtttgaa 420
ttttcagtcg ttaaaacagt tttgttcagg agattgttcg tgtga 465

```

<210> 390

<211> 553

<212> DNA

<213> Hippoglossus hippoglossus

<400> 390

```

aaacattcca gcatccactt ttctgtccca attatgggtca aaggcgtgag aggagaaagt 60
tgaactcctc tcgccaaact ccatctggag gcgctgtggc ggacagatcc gccaaagtgt 120
ggcggggctc actagcattc tgctcttgaa aataatgaac attcagtttt gccatctacc 180
gcatatcctg ccatcttggtg aattaaggga gggaaaggag agtgatggac agacagagga 240
agagacggag gtgaaacagt ggaggcaaag aaagtgggac agaaagtga ttttcatctg 300
aacagacagg attttgtagc aattattgaa atttgtcaaa aatgacaaat atatgtggaa 360
agacagaaac tctcatagct cgatagacag aacagggtgac aaatgagaaa tgaacataaa 420
gcacattagc atgggtgttg gttgccatgt gttccgatca ggatccacgt tttttttcat 480
caaacgataa aggtgatcac tttgaattca tttgcagtga ctccttcctt ctaaaagaac 540
aagtggacca aca 553

```

<210> 391

<211> 376

<212> DNA

<213> Hippoglossus hippoglossus

<400> 391

```

cgagggctag tgctttatac ctttcggatt tttcagatcc tcacttccaa cggaggggta 60
cccagaattc ctttcaaact accagcaaac tgggagagag acccaciaat gtagtatttt 120
ctccatgaat aagataaaaa aattatgagt attatgggtca cttttttctc aacaacctta 180
aagaacaaga ttgcgagcgc gctagcatgc tagggatctt ttttctgcat gatattcctg 240
tattttcaca taatgtcatg tcgcatcccc cttgaagggc tgtcccaatt cgtagggaaa 300
tgtttcaacc actaccctt gtgactccgt ttcaaggggc aggataaacc tcaaaaacaa 360
ggggtgaaat gagatt 376

```

<210> 392

<211> 515

<212> DNA

<213> Hippoglossus hippoglossus

<400> 392

```

atcggagtaa atggtcttca gagatacact ctaaagccga gtgagaattt ttgcgcttaa 60
actgcattct cagttcgatg gaagcaataa ggtagaaatg gttttacaga agcctttgga 120
ccgagagaaa caagagcaca tatcgttagt gttgactgcg gaggacggag gagaaccaca 180
gaggacagga acaatgcaga ttcacgtgac tgtgttggat gtaaacgaca atgcccctgt 240
cttcggtaaa caggtttaca aagcaagtat tacagaaaac tccgcaatag gaaccctcgt 300
tactaaagtc agtgcttcag atgcagacaa aggctcaaac ggcgagggtta catacgccat 360
agggaatagc atggataccg tttcaaaatt atttcacatt aatagtcacg gtgagggtgat 420
actagatggg gcaatagact atgaaaaaga aaaacattat cacatcgaca tagaagcggg 480
cgatcagggc ggactctcag attcaagtaa gataa 515

```

<210> 393

<211> 374

<212> DNA

<213> Hippoglossus hippoglossus

<400> 393

```

agcactaaaa atcaattacc ctgatcgag caattaacag tcaaatgatc gagcaaagga 60
aataaatttg atatttaca taatgcaatt ggaaagcaag taaaacttag agctattcta 120
gattagggct taaagtcaaa atgattcgag aataaaaagc atttgactaa agttgcaa 180
tatagtattc acccaacaaa tgactgctg tttcagtcac atgaactctg cttctccttt 240
tccgtttgat ccacagaata taccgggctt tataaatatg agtgggagtt taaccgtggg 300
aattgaacct caggaggcag catttggtta tcttctcccc gtgaaatata tccaaaaatg 360
caagagaggg caac 374

```

<210> 394

<211> 499

<212> DNA

<213> Hippoglossus hippoglossus

<400> 394

```

ataaaagcaa caatagtgtt ttctatcaga agatccgaac tgtagtcatt ccatttcata 60
agcaataaca caaatgttta ttacagtttc cccttaacct gtgaaatact tcaaccatat 120
actgaaaaac attatcaaag actttacgtt ttggaatagc aggtgttgtt tcatgtagct 180
ttacagtatc attactcagc gtcattgctt agagcataga gacaaagtgt aaacatgaat 240
tcaaataaat tattaaatcg caaaaaaaag gaagcttggg attttcttgt tcttgaggt 300
taagttacaa actggaaggc aaagacaatc atcgagtgtt acatccagtc gtctcagctt 360
ggagcggttg agtcctgagg gtcaccgagc cgcagcaact ttgagatcaa ggtcgggcag 420
cgacgaacag tcaagggtcaa cgatcccgtc ccgcgcacgc gagagcatct ctgttcgcaa 480
aagttccctg agagagtcc 499

```

<210> 395

<211> 388

<212> DNA

<213> Hippoglossus hippoglossus

<400> 395

```

tatcgttttc atcaaagttt tcattcagga tttctttctc ataatacaata tgactcaata 60
attacaaact ataagaacta tttccagcgt gatgctactt aaatacggcg aattgatcca 120
atgcagaggg gcgggattta gagatgtcaa aaatacacct cagttttcca aagaaatgat 180
tgattacacc gtggactaat gtcacgctta atagcaacaa taataatggg ctcatcttaa 240
atacacataa ttgtgtactg tgagcgatag caggtttatt tttattccta tgtttgacag 300
tttcaccata ttctatacaa agatgcatca atcttatttt ttcagatctg attctaatac 360
ctgaatttgg aacactacct ataccagt 388

```

<210> 396
 <211> 452
 <212> DNA
 <213> Hippoglossus hippoglossus

<400> 396
 acttcctcat ggctatTTTT acaggctcta taaataaagt tacgaaagtt attaaccaac 60
 attgttacag ttaattctgc ttctatcctg gaggaggagg aggaggagga ggaggaggag 120
 gaggagagca tcattaagtt aagtatgcgt gaggaagtga gagcagggga aatacagatg 180
 acttcctcgc cacaccactg atggaaagtc caatgtgtca gtagtaacaa tctcgggtgtt 240
 gtgtatTTTgt cctcacagcc aatcaaaggg catttTgtgt tttatgtgtg tgtgtatata 300
 tgtgacacct ttgtttTgtc tgtgtgtaac ttcaccacc gtaaataact gacctggtgg 360
 atgggatggg ggacagcctc attaaggaca atcccaagag catcaattga tggctgacag 420
 gtggagTcgt gggTtcagca aatgtcaaaa tg 452

<210> 397
 <211> 490
 <212> DNA
 <213> Hippoglossus hippoglossus

<400> 397
 ctgtggcgct ctctctctct ctctcctcgc tgtgctccag ctgactacaa acacagattc 60
 agtgggagac agttcgatgc cgcTcgtcca tcttTactgg cagcgtctcc tctccgtggT 120
 tcaccaggg agcgccgtcc accggggatc caccgagcta aataaccac cggaccCaga 180
 taccttatgg agtgtgaaga aatatttttt gttataaaat cttctggatt agaattgttt 240
 atttcgtaag atatgatgga aaacccatgt ccgattgtag gatgtgttta gttaaaacaa 300
 catttcagta cttttatcat ttattatgct tcattgacta acaaaacctt ttagcttTgt 360
 ttgtggagag ttcagtgaac cgcagaaact cagagaagat accgaagtag acgctgcggg 420
 agcggttcta tcacagagtt tctgggataa acagccggaa tgcgtccagg aacaaacttg 480
 gattattttt 490

<210> 398
 <211> 978
 <212> DNA
 <213> Hippoglossus hippoglossus

<400> 398
 gagaaacgag ctgagtaaga atgagtcag ctttcaatta tgcattcagcc tgacggacag 60
 gcagtgtttg ctttcagata gcagtcaaga gaggctagac ttacaggtga ccctgtaatc 120
 tgttgccatg ctgtctttac ttgaaaaacc agaaaatggT gagaaaacca atcgaaaaac 180
 tgaacactct cgaataaaca aacagttata actaatctga attaattaaa accaatcaat 240
 ctgactttct actcctacta ttacgtcca cgtatatgcc cacagttcca ttcgtactaa 300
 aatgacggTc tgcgtcggTc tggcattgct cgcattgcgt cgtgatccca cattccattc 360
 cattccagta ggtggggtaa tgcgcaataa ggttgtttgt caacctccgt ttaaatcaag 420
 aacttccatc aggaagtact catcccgacc aagcgtatag ctgtgacttc tctccaggag 480
 ttcaccccgT gtgcgtgttc ttatactcct tcatagattg gttgttcaat catgggtatc 540
 ggaggatctc ctcatgcagc ttctttttta aaccagtgtc catgttgttc atcttcttct 600
 tttatttgca aacaaacaaa catatgttgc acttgagca tgcacagtca atgcatactg 660
 tcagcgtggT taaaaataca aaacatttat gtcacgagga ccatagcgga ccctagtTga 720
 ctgacggatg tggaaatcac actgaaaaaa gatttgttta ccaacttaaa aaaacgactt 780
 taattgatga cacagaaatt aatacgTTTT attaaaatca aagttatcaa gcgtaaaata 840
 acatgttaac attcatctga accaattcat tcatttTgtg gttaccgggt aaatatattt 900
 tctacgttgg taaacaattt tctttttcca gtgtatgaat ttgcctttca tgttcccatc 960
 tctatccctc tggTgtga 978

<210> 399
 <211> 682

<212> DNA

<213> Hippoglossus hippoglossus

<400> 399

```

ctacccctga catcagaaac caggaacgta cagcttctgg aggagatact gatcatagtt 60
gctgatattc acacatgagg tgaaagtaac atattgaggg caaatttagt ttcacaaaga 120
aaaagctgtc atttatatac atctaccaca taaaacattt ttaatccttc tttaaattta 180
tcttataaaa tccctgacac ccaagataag tatagatgag ttattgatcc tcgtagagaa 240
aattcgaatt tgacacagca gcacaaaaga gcagctgcca aggggatgta gtaagaatta 300
aaactaagaa aagaaacaga agataagata aaaatagaaa tactatatac agtattggac 360
tgttctataa atattaaagt tatgcgatat acatgtacaa tatatagcct acctgaaatt 420
acaataccac agttgcaatg ctttcttttg tgtcaaatta attatctact taactgagct 480
gcaattttct ttgcagcatt aacagggtgt tagctgagat atataaaaca aatatggcat 540
gagatgaaaa atactatcca caggtagact gcagtacat gaagtcattg aggaagacaa 600
cttgccatct agatgagttt caagttatac aacttgataa acacacatga ttcaccttta 660
tagtggagtc tccatctgtc gt                                     682

```

<210> 400

<211> 622

<212> DNA

<213> Hippoglossus hippoglossus

<400> 400

```

gcgggatgca ggaactccac aagctgttgc cggcaactgc aggtgcgagt cactctcagc 60
ttattttgtat ttgccggatc agccatatta ccaataacat gtatgaaatg ttcaagaaat 120
aaaatgggca aagtgtgaaa tccttgttgt acatcttgga ttactttttc tgtttttgta 180
ttatttttaa gctttttaat tgtgacaaat cattagttgt gttaggggaca atcaagaata 240
ttttcccttt atatttgttt ttagtaattg tacaaaaatcc tgtataatct tcgttggtta 300
aaaaattcat ttatgtttta ttcttctaga cgtgtttgtt catattgaca cctacactgc 360
tgaaactgga gtgtcacggt tcttggagca aaacagaaac tggaggtcag tgtttattat 420
gttgatctca cgtctgtcag ttaatctaact gtgaacaata ctgacattta aagcttaata 480
ataatgactt actgttttta aacagatatg acaaacgtga ggacatgaat ccctcaaacc 540
ctgaaatcaa gatgtactct catctgctaa tggaggctga tgttaccaa atacatctac 600
tccaggacac tcaccagcct ct                                     622

```

<210> 401

<211> 557

<212> DNA

<213> Hippoglossus hippoglossus

<400> 401

```

atgaatataa atagttatcc gtgttaataa cctaagagca agttggcaaa cagcgtgatt 60
tggcagctgt ccatctgtct ctgggtgtca aggaaaggct gcttgtgtaa gagcagagag 120
ataaacatgc tgcaatagag catctttcaa atgactgaac ataaacactg gaatagtatt 180
aaatgtaaaa ttgataaatc aaatgtcaga aatgaaaagt ctcaaatcct tgtaactcat 240
gggagaagag acaaatgtgg attttgacta tgaccttgaa tcagtggagc ggttggtcat 300
gattagattt acaatgacaa agcactttgt cgtccctgga gcttgatcat ggagtacatg 360
ccattaggag ttatggatat tgtatgttag gcagttacat aaaattaatt gagattaatc 420
acctgcaatt taaacgctac agctggttaa aaataggtag ctgctgtcca tgtacagtat 480
gagacacttg tgttcaatgt ctctatataa tctacctact aattccacaa acgtctgtat 540
ttccatgtgt ctttatg                                     557

```

<210> 402

<211> 544

<212> DNA

<213> Hippoglossus hippoglossus

<220>
 <221> misc_feature
 <222> 430, 434, 436
 <223> n = A,T,C or G

<400> 402
 tctggttatg gaaagacatg atcaagttca tcagtttgaa ttgaaatgct gcatgttttt 60
 aagaaaccta tctacagtca tgtcagaaat cagtgaattc tctgtcattc atctataaaa 120
 ctgaatgagg acgtggataa aaacgaaggt ttcttttgctg agtggctgat ttgacctctt 180
 tgtcattggg agaggaggag gtgagttgca gcttgatgcc cccgatgtct ctcggaataa 240
 gactgggcac aatgaagagg ctctgggaag catccgatgt gggagaactg gaggaatttt 300
 cttgaaagaa aaaaaatctt ggatggtttt ctctgctttc ctggctggca gtgcaggaaa 360
 gcttcataat gcacatgcaa atacagccgg aacggggatg aatcattgga gcgatgaaga 420
 aattgaattn attnantttt attttacaaa aatactctga aatgattggt gtaaattggt 480
 tccagtttag gaagacagag cttctctata tatataaaac tattttctca gagtttggga 540
 ttat 544

<210> 403
 <211> 511
 <212> DNA
 <213> Hippoglossus hippoglossus

<220>
 <221> misc_feature
 <222> 129
 <223> n = A,T,C or G

<400> 403
 atccgataat aattcacgtt tcttaaaaata agtttatagc ctttagttaa tgcacacctg 60
 agggtaaaat tgcaaaacat ggtaagcaaa tatggagtgt ttgttttagt ttttagtgat 120
 gtacatcana aaacttcaaa caactttagg tggaggagga aaatttctcc ttcaaaagaa 180
 ttttaattaa atattttccac atctcaaata atacggagcc cccctggta tcagggtgaag 240
 aaaaaaaaa gatccattcc ctcaagttta caaacactt tacgcatgta agcatataaa 300
 tcaatcaatc aatcaaat tttttgcata gtccatattc acaaatcaca agttgtgaca 360
 tcctctgctc ttaaccctca acaagagtaa gggaaaaact actaaaaaaa aactgttaac 420
 aaggtaaaaa gaaggtagaa acctcagaga gagccacatg tgagggatcc ctctcccagg 480
 acggacagaa gtgcaataga tgcccacgtg t 511

<210> 404
 <211> 575
 <212> DNA
 <213> Hippoglossus hippoglossus

<400> 404
 cttctcaatt ccgggaatac cattaaggca gactttgtac ctttaatgga actgaaacca 60
 ggctccctct ctccatttgt tctccgaatt ctaggatcac tcattttgtt ttcgctcatt 120
 ttgtgttgtt cactgtcact aacatcggcg ccgctgtatt ctgtcgtcag gttcaacca 180
 gcaccactc atggtttgaa ggaattaaat cagaagcagg ctgaatggag gagatgcttt 240
 catggtgcgg agcatgaatc agagttagt gtatagatgt aactcaaagt tgttattctg 300
 ttgttaacac tgtaagtttg atcacttttt gatttttaat aattgacgtg ttttatattt 360
 tcagagacta aacgaggaga gagcggagag aaagaaactc aggatgcagc agtggagaca 420
 gaaacaggaa gaaggtaaa atgattcagg gttttttgag aagatgtaga tgaaatgaca 480
 ataataaagg aggataaggg gaacataatc aacattgaaa catccctgac attatttaat 540
 aacaaatttg taaataaatt caattaaata ttgat 575

<210> 405
 <211> 671

<212> DNA

<213> Hippoglossus hippoglossus

<400> 405

```

tgttgctctt gttttcccaa aatatattct tatattcgat gcccacattg tgtctagaaa 60
atgaactgca gcaaatactg aggagttttt agcctttatc ccaaaccctt aaacactaat 120
gtgtcctatt ttacatcctc cgttctactt ggcaggagat tttggcagta aaaccagttt 180
ttctgttaaa tattgaaact atcagctttt ggctgtgctg gtgtcagcta agacagtccc 240
ttggggaaat aataaggaag agatggacaa acttcctcct gctaaagtgc acagacacag 300
ttttaatgag ggtgcataaa gtgtaaatgt aatcacttta aactcgagct ggttggtttg 360
gacttcactt ctgtgtcgtg ctttttataa caactgcaaa aggacaacac agaagatatt 420
ggttaaagta aaagtgtcag tctgtcataa ctaatttacc tgacgactga gtttacattt 480
tctacaattt gacaggtgtg ttttaacaaa ttatagcagt tcaactttag ttagagctgt 540
aagagaaggt gcaatgataa gttcaactaa caagaataag tcaatggact ctttttgaat 600
aacctaagca tctaaagtga actcgagtaa actctccctc ttactttaga tccccagggt 660
attccaatga t                                     671

```

<210> 406

<211> 562

<212> DNA

<213> Hippoglossus hippoglossus

<400> 406

```

tcctgcttct cagttgcttc attcataaca catccttgac aatttttagga tggtaatcta 60
tgtgtcgctt gtgttcaggg aagtaggttg tctgataacg gctgcgttat gttccagact 120
aacccataat ggtctctctt cgactttccc tactgcagag ccaggtatac aggagccagc 180
ctgacttagt gtcagctgtc tatgacacca cagcctccac tctggctgtg gactactcct 240
atgcacagta cccaaaccaa actgatgcca cacagaacta cagccagtac ctctatcctt 300
ctgagtacac tgcagacagc acatggatca gccctgagca acgtaaggag aacatttctca 360
cgctctcagc ctttttaagc ttaaccaatc tctaaatgtt aacaggatct ttatcagaga 420
tcagtcaaac actcacagtc tgactcttgt tttccccgta gcacccctc gtcctgcaac 480
cccagagaag tttagcatat ccaccgctg tgcccgcctt ggacctggtg gtcacctggt 540
tcaagttctg cccaatctcc cc                                     562

```

<210> 407

<211> 531

<212> DNA

<213> Hippoglossus hippoglossus

<400> 407

```

acttataatc actaattcaa ataatgaacc acttcattca tctctgttag taaaactgaa 60
aaagctcatg agaaaagaca ctaaacacac caggttttca aagctgaatt ctttaaagcc 120
tgcaaactta aagtaacaca gagattagtc tgatatgtac tagatttgtt tattgttatt 180
ataactgtca tcctaaattt gagatattca attatgggac aaaatttgtt tgagatgaac 240
tcatttttga acagattcct tttgttttgt tgaattatca ctgtaggctg atttataaat 300
cagtttaagt aagattttgt tgtttttgca agtgtccaca ttgttggtat gttgcattaa 360
aactaattca acccacattt ttaatgaaaa cataactgaa gtattaaact tagtttttgg 420
ttctatctgc aggtggtcag aagagtgacc gcagatcggt ggtctccagt ctcgactgtc 480
tctccagcat tgtggagcga atctccactg acaacagcag cttgatgccg g                                     531

```

<210> 408

<211> 818

<212> DNA

<213> Hippoglossus hippoglossus

<400> 408

```

ggcactaccc cgcactaccc ttctggata aaaaacacat gtgggagccc acaaccccca 60

```

```

ctgcataagc aaataatgcc tggggattgg ctagtgcgat tcatttcact attattccat 120
aggcacgcta acaggaataa tatgccattg tccttttatt tcttttactt ctcacacact 180
ttgtgtaaaa tcacatccat ccacgagcca accaaccaaa aaactgtaag tgcacctttt 240
ttaaaaaaaaa aacagtttgc acattcaaga cacataaaaaa ggtcaaaatg tcactgtgca 300
gtttaactcc ctctcccaa aagtccttga ccataagcac agtctgggtt gtcgaaaata 360
aaatataaaa aactgcacaa tttatgaagg agtgtacatt ttgacacgca taaacagtac 420
cttgaagata tacataaaaat taaaaagtca gcatagagag ccaacttcag tttctcccat 480
aagcccaaca gttagtgaac ttggcatccc tcgccgcaaa cgtgtatacc atatgcaccg 540
tacataagta ctttctataa aaaataaaaa agattctttc catcagatga caaacagat 600
ctgattgcta tatcgttaag aaaaagtaca aagtttgatc gaaaacaaaa atgaccacac 660
atatacagac agaagaaata ctttgcacac ttgctggggc gacaaagata atactgatgt 720
gtatttttga caaaaaaaaaa aaaagcgagg gggagaaagt caaactttta agtcctcagg 780
cttcttgtaa actgcaattt gaatgtaatg cttaacag 818

```

<210> 409

<211> 673

<212> DNA

<213> Hippoglossus hippoglossus

<400> 409

```

tcctctacat tagcggtcga agacgccgct tcagaaggag gaggatccga gctgtgagcg 60
gttatctctg taaaaacaga tgtacaggct tctgtgacct gctcgatctc ttcctgtgat 120
tctggtttta gggtggagaa gaaccattct ggatcttaaa tttaaacggg gctctgatct 180
aggaaggctct ctgcctcagg tgtaaataca ggttttaact cggaggcagt ctgctgacat 240
gtcccttctt tacgggtgtg ttgcaaaaat tccaggctat tgaaaagctc atcacagtcc 300
ccacattggg agaggatcct aggctggctt gctgtcactg ttgcatcagc tgcagtctgg 360
ctgagttcac ttttatcaat ttgaacagag gatggtcctt cttggacttg aatctgttga 420
agtgaactg tccttgatac atttaatagc ttttgctgca aagagaaggg aggaaagagg 480
aaaaacaggg attagcttca atttctctat gcaaaaaataa aacaactcgg taatattaat 540
caaatacctg ttaagtcact tccacctgct gtgtttttct ttaattttat cctatctggc 600
agatagggaa tgagaattga gtgccggggg actgagggtca attagagcag cgtgtgttta 660
gagccaagggt tcc 673

```

<210> 410

<211> 356

<212> DNA

<213> Gadus morhua

<220>

<221> misc_feature

<222> 322, 330

<223> n = A,T,C or G

<400> 410

```

tttttaacag taggtaacgt gtttacgtgg gtgaataatt taactgtttt tcaccacttt 60
actatctctc ttgtaaacca atccttgacg acatttggaa ataaacatgt cctctgccgt 120
tgtcccatgt ccattgtgac aacattgggc aatgttgccg tgtcatgttt ttgctgggtt 180
tgtttgggta ttgtgtatca ttgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt 240
gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt cactgagctg agccaaatgc 300
ctggggggat cctctagagt cnacctgcan gcatgcaagc ttggcactgg ccgtct 356

```

<210> 411

<211> 384

<212> DNA

<213> Gadus morhua

<220>

<221> misc_feature

<222> 116

<223> n = A,T,C or G

<400> 411

```
tctctctctc gttctctctg acatgcttgg agggtagacatt gcagagatcc gtctgctgga 60
tcaaacaagg tctaataccat aaatgtgtta ggttaataaac ttaaagagtt gatttncagt 120
gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgc gtgctgtgct 180
gctgtgctgc gtgctgtgct gctgtgctgc gtgctgtgct gctgtgctgc gtgctgtgtg 240
gtgtgtgtgt gtgtgtgtga gtgtgtgtgt gtgtgtgtgt tcgtatgctc gcatgtgttt 300
gtgtgtgtgg aactaaggga acggtgagag gaaaggagga caggatgatg acaggctagc 360
gatgcagaag atcatatccg tgtc                                     384
```

<210> 412

<211> 338

<212> DNA

<213> *Gadus morhua*

<400> 412

```
agacatcgct ttctcacaca cacacacaca cacacacaca cacacacaca cacacacaca 60
cacacacaca cacaatgaag aaaaaaacat ttacctggca ggaaccagtg ttgctcaact 120
ggaatatccc tgtttcttta tatatcctat ctgctatgca tttcaaaata catttggtgc 180
attggcagac cttatcaaac gttttgctag ctataagatt tgtttatata tgtaaggggg 240
gggggtcctg tttaaatata ggtgtgaaat ctggacagat ggttcagtcg agtttttttt 300
tctgatattc attaaaagtg ggataaatgt ggtcgcct                                     338
```

<210> 413

<211> 299

<212> DNA

<213> *Gadus morhua*

<400> 413

```
cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca 60
cacacacaca cacacacaca cacacacacg ttgatctttc tattcatctt tccactggg 120
ctcttattca cagggagtca cggcgcgaca gagcgacaca gtgaacattc gagagagggg 180
aggaaaccca agaggtcctt tggctgacgg attaaactcca accgcggcctt ttccacctgc 240
tgaacaagaa ctgaagacaa tgagcggcgg ctaaccacgt tagtcgctca caatgagat 299
```

<210> 414

<211> 471

<212> DNA

<213> *Gadus morhua*

<400> 414

```
gccctgatcg ccatgacgac aaaccagaca caattacctt gtcacagctg cctgggaaaa 60
atattgttta tagataaata agaattgaac cacaagggcg tttatcaaag tcgggcttga 120
gtgaggaggg ggggtgagag agagagagag agagagagag agagagagag agagagagag 180
agagatgtat atgagaaata cacaaatcta tatatttatt atacttttgg actgaatgcc 240
cgttccacaa tgtgacttta cctgtttact gccggcagta gaggggagaa gaaaccattt 300
ttattcatgc gcagatgaca aacgagcagg tcaagcgaat cagagggtcaa gtgaagtggg 360
ttactttgtt gttttttttg ccgtatgagt ttgatattca tatttcgtat tcgccgtatt 420
aactgcccggt ttcaaggaca gagacgtagg ggagggggcg atacgattgc a 471
```

<210> 415

<211> 138

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 134

<223> n = A,T,C or G

<400> 415

```
agcaaccaag ccagaaccaa acctgggaag ttcaatagtg tgtgtgtgtg tgtgtgtgtg 60
tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgttaacccc cctagcaagc 120
aggacgaaac cagnatcc 138
```

<210> 416

<211> 635

<212> DNA

<213> *Rococcus saxatilis*

<220>

<221> misc_feature

<222> 243, 290, 526, 588, 590, 635

<223> n = A,T,C or G

<400> 416

```
atctgcaaat aagttaatat tcacgcttac ctacaatgat atctgtagca tttatatcag 60
attatatcta caaacagttt tattgttaat gcaaaaggga gcagggattt tgggtgtgtgt 120
gtgtgtgtgt gtgtgtgtgt gtgtacctgt gctggaggca tgatgtactg ctggatgtgt 180
tctccagtaa tgtgctctgg ttcaaagctg tcacatgcaa taatgacttc tatgttgcta 240
tanaaactcc ggatgctatt caacaacacc ttgagttgtc tgtagcgcan gaatgtcttt 300
gtcgtgatgg tgacttgcca gctgatatct gattgagtta ttaaaacaaa aagacaaggt 360
gataagacac agtgtaagca gaactgtcat gtcatgggga aaagaattcc attgtcaaatt 420
atctacctgt tcccatgtcg tataggactg gcacctgagg ctgtttgatg gtaatgggaa 480
acacagcttc atgcttgtca aaactggaag gaggctgagt cagaanaaga cagtcaaggg 540
gtgggtttacc agtaatacat tacttaattc tgacatttaa aaaacaangn gggctaagac 600
ccccagtgaa tcttgccctgt ctgaaacaca caaan 635
```

<210> 417

<211> 629

<212> DNA

<213> *Rococcus saxatilis*

<220>

<221> misc_feature

<222> 4, 10, 395, 407, 413, 445, 450, 451, 482, 495, 507, 510,
528, 541, 545, 553, 558, 588, 590, 595, 596, 599, 614, 617, 621, 622

<223> n = A,T,C or G

<400> 417

```
tggntctggn tcttcatcct ctgggactct gtttccctcc agctgtggac cagcagtgtt 60
agcatgttag ctccacttca ctaattagca ctccctggcta atcagctcca tgttactgtt 120
cacctgccac acacacacac acacacacac acacacacac acacacacac acagagtcac 180
ttcaaagact ctccctcctct tcatcatccg ttttccctctt cgctccagtt tttcttttca 240
tctcgtcttc aactgctccc agcagggtgtt cacactcaga aaagacttta aatgagatta 300
ctgtacacac tgtacgtgtg tgtgtgtgtg tgtgtgtgtg cgtgcgtgcg tgcgtgcgtg 360
tgtgtgtgtg tgtgtgctgt tgtgtgtgag cccancctta agctctntgt ctncatggta 420
acacaacca aaggagaggg gaagngagtn ntgtgggttaa aaagagaaaa cagggattta 480
anagctgatg aaaanatctg tctgtgntgn cccctggggg gggaggggna actacccccc 540
ntttntttac agngcccnta atcaataatg gggttggtgaa aaagaacncn gatanntcnc 600
ttgggcaaaa gttntgnttt nngggggtt 629
```

<210> 418
 <211> 630
 <212> DNA
 <213> *Roccus saxatilis*

<220>
 <221> misc_feature
 <222> 420, 510, 534, 630
 <223> n = A,T,C or G

<400> 418
 ctggttagtc ctgtacgtgt ttgtctcctc taaaagtaac caaataccag tctacttgcc 60
 actcttgaat aactctctga ccgactggac tgctgagaag gttgtgagag tgtgtccaga 120
 ttcatatgtg tgtgtgtgtg tgtgtgtgtg tgtatcaaac agaagagaaa atgctaaaag 180
 tcatgcaaga cagcgggaata aagctggaat agcaacaagg gagaaactgg atggcaatga 240
 agtgagtga cagacagggtt attggcagca gagggaaaagt aaaaggctgg atgtccattg 300
 aagacgtaga tgaaggaaaag agaagggtgct tttagtagct aaaaggagag gaagagtgcc 360
 agaaatatat aaactacaca gtttaaagtgt tggtaacagg ggaaccacag ttagagagggn 420
 ttatgttcat ccttaatggc tctttccctg taacccatag tggaccaatc ttgaacttgg 480
 cttcttataa atcatcatca tctgaatcan aagttagtga taagtgtctt tccngggggg 540
 tggctctctc aaaaaaggct ttattttgtc acatgggcca ttacggcatt taacgtgcat 600
 ggccggtcct taagcaagct acttggctgn 630

<210> 419
 <211> 634
 <212> DNA
 <213> *Roccus saxatilis*

<220>
 <221> misc_feature
 <222> 286, 367, 386, 507, 510, 515, 552, 595, 606, 626
 <223> n = A,T,C or G

<400> 419
 tgaataaata cttcgtccac cactggaacc gcgctcattc acattaacat tcatacagta 60
 gctgcaggag acatatggcc aattacactc aaccatttcc tgctctctca ctcacacaca 120
 cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca aaaagagctc 180
 tcatgtaaac agtggcctac ataatacaca ctgtctttct tgactgcttt ctctctctct 240
 ccctctctgt ctgtaaatgg gtcagttgag acagaccact ggtcanacag acttggcacg 300
 ggtccgtgtg tgtgtgtgaa gttgttaaatt tctttgagag ctttgtaatg ggggtgtgtt 360
 gtgaacnaag ctttcttgtt gacacnggtt tgctgtaact gcttactagt atgaaaataa 420
 agtggaggaa gcccaacggg ggacaaactc atcacaactt ttaaaatgta taatactggg 480
 gtagaaatgt ggcatacaat ctagganggn cacangaaaa cactctgaaa agaaaacagc 540
 taaggcaatg gntattaatt ctgagaccag aatatcatat atactgggtg tggngtggg 600
 gggggnctgt ggctgggctc tgtctnttaa aacc 634

<210> 420
 <211> 669
 <212> DNA
 <213> *Roccus saxatilis*

<220>
 <221> misc_feature
 <222> 113, 155, 202, 212, 220, 315, 342, 344, 364, 392, 393, 487,
 492, 500, 507, 530, 535, 538, 550, 560, 561, 580, 588, 621, 652, 653,
 657, 669

<223> n = A,T,C or G

<400> 420

```
cagttttctca cttaaggaca tctgagtgtg tggcagaagc tgcagcacgg attgaatgct 60
gccctgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgngcacaca 120
tgcacaaact gaacatagaa gtgaaagtga tgtgngagca gctcttcaat atctgactct 180
gccttgtttc caacagagat anacctctgc anaaacacan gattctctag tgcagtttgc 240
acaacaccag ggcattgtatt aattcactct gcacaataaa cactatcaca ggtcctgaat 300
gttttgggtgg atggntcctg aaataaaaaca cacacccctc cngngagtgt tacacaagct 360
gttnttgaag catggaagaa agtcaaagtg tnnaggagg agcgaaacgc aggacagaga 420
gacagagaga aatgcgtgac atactgtagc tcaactgccc actcttttta tggctcttat 480
gaaacanact gngtatatcn tgggtggnatt tttcacattt ataccaccn cacanaanag 540
aatttatccn tccccttgan ncccataaaa tattttaagg ggggtccngg ggaatgggac 600
ctaaaccacc aaaaaaaccc nttcaaggaa ataaccatca attttcaaaa annctgncat 660
tcaagttn
```

<210> 421

<211> 450

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 280, 290, 300, 302, 308, 312, 315, 319, 321, 322, 323, 325,
330, 331, 332, 333, 334, 339, 342, 345, 348, 349, 351, 354, 356, 358,
365, 366, 367, 372, 373, 375, 381, 382, 384, 385, 386, 387, 388, 389, 391, 394,
397, 402, 404, 413, 418

<223> n = A,T,C or G

<221> misc_feature

<222> 428, 429, 431, 432, 434, 435, 436, 437, 439, 440, 442, 445,
446, 448, 450

<223> n = A,T,C or G

<400> 421

```
aaagacaaga cacagcctgg ccaactaact ggaactgtga gcctggaagc tttatgtgtg 60
tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgag agagagagag agagagagag 120
agagagagag agtgtgtctg catgcacaca aagagtga atattcacta tgagaggaga 180
tatttgttca gccggggaat ttactgatga gattagctct ggtagggggg tttgggggtg 240
tggaatgtaa acaaaaggca agcggagaga aagactttan gagaagattn ggaccccccn 300
cncncncntt cntngncanc nnnnncacgn nnnnttttna gnttncntng ngntntcnta 360
acaannncct tnnanggccca nncnnnnnng nctngtnaac cntnttaaag tgnattnttg 420
aaacattnng nntnnnnntn tnaanntn
```

<210> 422

<211> 635

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 596, 600, 623, 629

<223> n = A,T,C or G

<400> 422

```
ttgccagagc agctttgcac tctgaatgta caactgataa tattggattt gtatgtttag 60
cattagaaaa tagttgcttt caaattatgc atttgctcca taagaccgca ttaataatgg 120
```

```

agcaggctgg tatctgccat ttgttcttct ttgttcctct tgaaacgtga catcaattat 180
gtatcaccaa aaaattgtga attaaatata atgcatattt ttctttgcag tcaaaagaga 240
atgtccgatg agaaaattct ttacggatat cagaagaaat actaaatgat tctgttactt 300
gaaaataaaa gttgaaagtc cagttgggtt ggacagtcga gacaagcttg gcttcagtat 360
aaatatcatc cagtgtgacc tcggctgtag agctggctct ggccctttgt tgaactaaag 420
cttttagcaa cacagtaggc atgtgcacac acaaaacaca cacacacaca cacacacaca 480
cacacacaca caagatacac gtgtgcaggt agacacgttg cttgaatgtc cattactgac 540
ttactatgcc attactgtga gaactgatag cacggaatac tggtttattg ctctgnectgn 600
aatttatcct caaatcagag aanagcttnt ggaag 635

```

<210> 423

<211> 774

<212> DNA

<213> *Rococcus saxatilis*

<220>

<221> misc_feature

<222> 79, 417, 457, 538, 541, 549, 552, 584, 618, 631, 634, 643,
659, 660, 690, 710, 722, 727, 732, 751, 764

<223> n = A,T,C or G

<400> 423

```

ccatagcttg gcaacttaca taaaatgttt aagtagttta gtgaagagaa gaaaatatga 60
ttagttagag taccatagna atatagtaac catgggcata cacacacaca cacacacaca 120
cacacagaga actacacgca cacacacata cacaaatata aacatttaca caggcccaca 180
cacccataca catatgtata cccatatatc caatatgtat agcttcctca ctattcgtaa 240
caacgtttgtg tgtctgtccg tctgggtttt gtgctggttt ttgccccttt tttattagaa 300
atcgatccat tttgtgcctg catctcacgc tgactagcgg agctgacgta acctggctgc 360
cagcgtgcac tgcagtcaaa tgtaaacaaat gccataagca ggctgcattt gccaggnttc 420
acagtgcccc ctttaggaaa caccattaat gaaaggntaa aaggagaaaag tgtaaatgca 480
gtgcagtgggt cactgggtata ttttatgtta gccggcattt tggaaaaaaa aatgttantt 540
nggcttgngng gnttaaccca ttatttgggg ttattaaagc cttnacccca ttggcgggag 600
gccccacccc aattttttnaa aaggcctttt ngancccaaa ggnccccccc aattggttnn 660
gggcttttctg gccggaaaag cccccaccn cccaaatttg ggaaggtttn tttttttttt 720
gnggggnggg gntaaaaaag ggggggagag nttttttttt ttanaaaaac gcgg 774

```

<210> 424

<211> 671

<212> DNA

<213> *Rococcus saxatilis*

<220>

<221> misc_feature

<222> 536, 538, 552, 555, 581, 593, 599, 612, 628, 644, 654, 655,
658, 660, 670

<223> n = A,T,C or G

<400> 424

```

ttttgccctt cataatagtc gcagcacttg tcattcccag tgaactctgc cccctgtact 60
ccttccaaca tatcccaata cacacacaca cacacacaca cacacacaca cacacacaca 120
cacacacaca aacacactgg tgagcgagtt gactgcggag caaaaagtgg caggagagag 180
tggcattggg aacgtctgtg ccagttgcct gccgacggca cctttgggat tggtaaagtt 240
tgatttgatg gctttccctg ttaattaggg tttggaggtg actcctgaaa tggaaatggg 300
caaaatgttc aaaaaaagat gtgccaatc ccacaccccc tccatctcca ccttccaaaa 360
catgtgaccc atatactgga gtacctagtg aagaaagtag aacaatcaag tcatttgaag 420
ttataggcca ctctgtattt gtgtttttct gccaacgtag gcagggcagt tcagtcaaac 480
taataatgtg aaataggcta aaacttgtat gtgaacaaaa gtcaaccaac aaaatntngg 540

```

```

gaaccaaaga anaanaatgg tttggttctt ttaattaatt ngggccatac atnttttgnt 600
tcaagccttt tnaaaattta cattgtcnaa ggtaacaact ggtncctt gttntntntn 660
gaaaaaaaaatn c 671

```

```

<210> 425
<211> 659
<212> DNA
<213> Roccus saxatilis

```

```

<220>
<221> misc_feature
<222> 614, 628
<223> n = A,T,C or G

```

```

<400> 425
atttagttgg ttgaacagat gcagataatg gtgcactcgc tacatcccta tattgtacag 60
attgtaagcc ctttgatgca aatttgatgc aaatttattt ttttaatttg ggtaataaaa 120
ttgacttggg acttaagaga atgtatttgg atgctctcca ccactgtgtt tcaggagcta 180
tattattctg aagttaagta accaatgtaa taaaagggtg agagaacaga gacaagccat 240
agagacaggt ccacctgcaa tgacctcagt cctcccactc acctctgaac cttctcctga 300
ggatttgtca aacatctcca gcgcagtaat cacatgacat ttacaactga acttctttca 360
ccagtatgaa taacacccca cacacacaca cacacacaca cacacacaca cagtgcagaca 420
cgtaattaat tacagtaaca tatcgtccag tagaaaggag tgacttttaa ggttgactgt 480
ttcagttacg ttgtcatgct gtgctgtgga cttttcacat tcttcagacc tttctgtgga 540
gagaaccccc cccttcgcaa aggtgtcaaa aagattttcc cagcccgagg cacattaaaa 600
atgaaaccaa aggnngctcac ccaacttncc aattagctga aagaaatttc ttttggaat 659

```

```

<210> 426
<211> 627
<212> DNA
<213> Roccus saxatilis

```

```

<220>
<221> misc_feature
<222> 419, 487, 531, 540, 548, 557, 563, 571, 582, 587, 592, 617
<223> n = A,T,C or G

```

```

<400> 426
attcggggga acctggaaaa aatttaagat gcactgtttg caaatgacct cgtgacaaca 60
tatgttgaca cgacttgtca catatgttcc ttaaaagggtg ttgcgtgtgt gtactgcaca 120
taacacacac acacacacac aaacaatgaa agccatgtca ttccatggaa actgttgctg 180
ttggttccag gaagtgcagc aaaccagata caggaagtga acggccaccc agtcatgggtg 240
gaaactgggg gtggaagcta agaatactgc agacctgtgt acgtgtgtgt gtgtgtgtgt 300
gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgatttgtg aacctgtggt ctgcaagaaa 360
agaatcacat caggaagtga taaaaagtct gaaaggacaa ttttattttt ctgttttttna 420
aaaacatggt taacttgaag ctgtttgttg gtctcccgtc cttattggta ttttatattt 480
cattggnaca tgaaacccat gcctgctgta aatcaccaca acatcccaga ngaattgttn 540
ttaggtgnca ggttggnctt cgnctgtcna ntttgagacc cnctcanaga gngactgttt 600
tatttaaaac tttccnnaaa taactgt 627

```

```

<210> 427
<211> 732
<212> DNA
<213> Roccus saxatilis

```

```

<220>
<221> misc_feature

```

<222> 535, 601, 605, 607, 626, 662, 670, 677, 681, 698, 719, 720

<223> n = A,T,C or G

<400> 427

```
tgctgtagcg cggtaacact cattgtgtgt ctcacacaca cacacacaca cacacacaca 60
cacacacaca cacacacaca cacacacaca cacactgacc acctaatttt ggaaactctt 120
ttggaaacgc tgtcatccac gtgcacgcgc acacagacct gtcccacata atgagctgca 180
ttatctcccc atctgtgttt atgctttatt tgagctcatt tggaaatcagc cagcttttta 240
tttagggctt ggcttattag tggcagtgtc gagatagaag tggttggatg gtatttgagt 300
cacctgggaa attatggata agataaagct acctgcttat tccttcgggg ggaaaacaca 360
caacacatta cagactgtat taactggctg gatgacggac taggacgcag agaaaggcag 420
acaggaaaag atacagatgt agtagtaggg ctacacatta aaagcattaa ttacactaca 480
caacattaaa aactttatta ttggggagtc cccctattcc agggaaatat tttgnggagg 540
tcttatgggt aaaaaaaggc ctctcttctt ttaataaggc cccaccacc accaatggcc 600
nggcnangaa aacccaaaac ccccncccc ccaaaaaaaa ccaaggtttt taaaaaaaat 660
tnggggggtn aaaattnggg nccttacctt aaaataangg gaaggccttt ttcccggggn 720
cttttttaat tt                                     732
```

<210> 428

<211> 665

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 41, 115, 178, 304, 310, 331, 335, 385, 397, 406, 461, 468,
471, 476, 483, 488, 489, 511, 518, 521, 530, 546, 557, 566, 576, 577,
579, 583, 585, 586, 597, 599, 600, 604, 605, 611, 612, 613, 618, 627, 630, 631,
643, 653, 656

<223> n = A,T,C or G

<400> 428

```
ggggatcatt aaaataaacc aggtactgat ttctgaatca ntctgatgtc ctgatgggtc 60
agagggatga agtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgntgaca 120
cctgtcatgc atgcaactgg aatcttgctt tgctgtatac tgacacactc agatcctnta 180
gagtcgacct gcaggcatgc aagcttggca ctggccgctg ttttacaacg tcgtgactgg 240
gaaaaccctg gcgttaccca acttaatcgc cttgcagcac atcccccttt cgccagctgg 300
cgtnatagcn aagaggcccc caccgatcgc ncttnccaac agttgcgcag cctgaatggc 360
gaatggcgcc tgatgcggta tttntctt acgcatntgt gcggtntttc acaccgcata 420
tggtgcactc ttcattacaa tctgctctga tgccggcata nttaagcnag ncccgcnacac 480
ccnccaanna cccgcttgac gcgccctgat nggcttgnat ngctcccggg catccgcttt 540
acaganaagt ctgtganccg tctccnggaa gctttntnt gtnannaaag ttttgtncnn 600
gtcnntcacc nnaaactngc gccgganaaa naaaagggcc ttngctgaaa acntcnttat 660
ttttt                                     665
```

<210> 429

<211> 624

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 514, 524, 539, 549

<223> n = A,T,C or G

<400> 429

```
tttgaaaccg ggcacccaac tgctctcttt ctttactct cctctctct gaattgtcaa 60
```

```

cctattaaat gtctctttgt atctcgccca ttcacacaca aactgaccaa tggaaagctt 120
tggacccttt cagtgcagag gtgtgtgtgt gtgtgtgtgt gtgtgtgtga gattgtcata 180
acggagctgt cccagttctt tttgtacatt gattgcacca atgttatttt actagtttag 240
aaagcagatg tcaactgcatg tgtgcgtgtg tgagagagtg tttgtgaatg agactgacag 300
agactgtgag ggtggtgtgt atgtggtaga gttacatgaa gaacaatagc cttattgtac 360
ctgtctgctg ctactgtctg tcttgtgtcg atgctctgca ctgagcctat ttgcctcatt 420
ctttgtgtaa ccgatcacac atttgtgaat aaagtctgac atttctgagt tataatcatac 480
acttgtaagc tctctggtgg cttaagtggg gcanggttcc ccantgtatt ggaactaant 540
atcaccagn gtagttttct accaactctg gcttcgacta ttattcagta ttgctcttgc 600
atttaacact acatgggcga acat                                     624

```

<210> 430

<211> 672

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 579, 599, 656, 672

<223> n = A,T,C or G

<400> 430

```

caaatctaataaacggctcca ctctgggttat tggaatgctc gccacactta cctttgcaca 60
ctttgtgtca cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca 120
cacgtagact gaggtatata cttactcttt attcagaaaa accttactta gcactctctt 180
tcaaattata ttacacttac tgtacatcac atgtgaacac atacagtagt gctgtaaatt 240
gatttcagtt aaccatcatg acagtgtttt ttaatagaga atagtgggaa actgtagggt 300
aaacatactt taggggtgag aatgttgtat gtctgacgtc tcacatccta ataccagtca 360
acattagtggt tcaaaaagag tggtactcat tactctgaag agacacagag taaaatgaga 420
agtagagcac taggcatgaa gtgaacagca gggagcagca atagaattgt gcaaacatta 480
cattgcctgt gtttgggtcag agagcttctg gtttcatata tglttggtgta acccggtatg 540
tatcaacggc agtccaagct accaggtgta tctaccang tacatttact tattgctgnc 600
atctcttcag tctgtcccta tgctaatatg gtctattgtg taaaccgggg cctttnggct 660
taatctaagt cn                                     672

```

<210> 431

<211> 500

<212> DNA

<213> *Roccus saxatilis*

<400> 431

```

aggcgttgta aatcagtcac acagctccca tgtcactgga gatactggaa atgactccac 60
ttccagtcct cagcgtcctg cccatgtgat tgccacttta aaagacattt gctttataat 120
acacttacat ttttttaaag attcattttc agactgcgaa ctgtacactg gcggcaaagg 180
gggggctttg tactgacctt gacaaaaaac gcccaactaa ttcactcttt gctctcgaac 240
atcaaggccg atgaactgat agcgttttat tgctggcaat aacaatatca caccgatggc 300
acaaggtccc attacatcac cgaattcatt cacagcttaa ctgactctgt gtattccagt 360
tacacacaca cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca 420
cacctgtagt tgcccttctt gcggagctgc tccttgaaa tggtcccagg tgagactgtg 480
gctcttcatg gcctccggtg                                     500

```

<210> 432

<211> 671

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature
 <222> 399, 476, 555, 643, 645, 648, 668, 670
 <223> n = A,T,C or G

<400> 432
 aattaactat taatatagtt acagcgggttg tgcattgggag tttcatacct agtggaaatt 60
 aagagcttat cacactgcac aggtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt 120
 gtgtgtgttg tttgtttgtt tgtttgttta acagctgttc aggattttat tttgggtgaa 180
 atgcatgagt ctgtttttta tgtaccatgt accctgtgtt ttcactgtcc taccacaact 240
 gacttgtctt atcattagga cagggactcg ggcaacaaaag tctgcattgt ggttttttctc 300
 tttacaccag tgctagcgtt acttgtgtca aagccggggc agattttcaa acattcctca 360
 tacttgtctga catattttctt catggtttgc tcctgtctnc attgcgctgt ctgactcaat 420
 ttcttcaccc gcccttttct tagcatgcaa atgtgtgttt tgttttagtg taaaangaaa 480
 gcgtatgctc actggttaac acgcacaagc tgaagggtgc agtgcacttt gacatgacat 540
 ttaaaaaatca ttctntacag gaaccagttg gtgtagccca aatccatcag ggccacatac 600
 ttcaacccgg ggtagaagtt attctgggtt atactgcacc atntntancc ccgggccatt 660
 gttttatntn t 671

<210> 433
 <211> 667
 <212> DNA
 <213> *Roccus saxatilis*

<220>
 <221> misc_feature
 <222> 453, 511, 516, 597, 624, 660
 <223> n = A,T,C or G

<400> 433
 taaatcctct tcacagcgtt gtctaattac tcccaacaac atggtagctg attaacttgt 60
 aattgctgct ctgaacgcag cctgtccctc tcttctcggt agggttatta ctgactataa 120
 ttaccgctaa tgtgcattga ggaacacaca cacacacaca cacacacaca cacacacaca 180
 cacacacaca cacacacaca ctcacacaca catacacaca cacacacaca tacacacaca 240
 cacacacaac ctcacatgta cacaacacaga cgtgcagggtg gaagctcatg cacaagcacc 300
 tgaacacaca tattcttctt cacaatacac tcgtgcacac acctcgccag gagaataactt 360
 atattcttgg aaactgtgac tgggtgcacaa agcaataaca gtgaaattta ggcaactaaa 420
 ttcattttcc gtacgttccc tcatttaagt gnggggattc acagcagcca aaaacccttt 480
 aatgggtctt atatgtcacc tcattgtctt nctggnctt taaagcccca tcatttacc 540
 caaatcggac attgatgtcc cttgagcagt gctgaaagtg aagcctatga cattctnct 600
 accatttgag atttggtaaa ttgnggatga tgtgaacgta ccagcgtagg ctattttctn 660
 ttggtaa 667

<210> 434
 <211> 271
 <212> DNA
 <213> *Roccus saxatilis*

<220>
 <221> misc_feature
 <222> 2, 5, 14, 17, 19
 <223> n = A,T,C or G

<400> 434
 gntangaatg agangantnc gagctcggta cccggggatc aatttcaatg cattctaaa 60
 accatcatca ttaaactgtt tgcttgggtc gtcactgccc gggccctaata taaatatata 120
 tctttttattc aatatttatc acacacacac acacacacac acacacacac acacacacac 180
 acacacacac acacacacac acaaacgcac aaacaccttg tgttcttttag tttagtgcac 240

ttagttagat tatatatata tattttatga a

271

<210> 435

<211> 738

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 11, 539, 591, 604, 614, 618, 651, 659, 669, 690, 693, 702,
706, 708, 714, 723, 729, 733

<223> n = A,T,C or G

<400> 435

```
gctgcctgca ngtcgactct agaggatcgg cacatgtcta caatatcagg taactgactt 60
tgtacttaag gggggcaact gttaaaaaata gactcacacc ccgagactgc cagctctgcc 120
tgagctcata ctgaagtcct acatcatagg tctatatctt caaccacacg gctatgaaaa 180
gggtacgtac tacatgcatg gctgaaaatc cccttcaaag gctatgacat ctgtactaat 240
acctcaagta ataatactac ttttattatg tgtgattcag ctgtgagcta acttgtttga 300
catatgttgg tggttttttc tttgggcatg gtaaatgttg tcaatcacac tgctttgacg 360
cttacaacac tgatgatggg ttgacatgca cacacacaca ccacacacac acacacacac 420
acacacacac acacacacac tctgctgtgc tgcttgacac tcatgattca ctctgtaaag 480
gcatcagaat taattccaca tgattttacac cgtgtaatga attttgacaa aatacttgnt 540
tgtgggttttc acccctgggc atttgcagca gtgagtgggt gaagaaaaat ntttcaattt 600
tganggcagg aatngtnttt tattttttca aaaaacaagt tttaaaaatg ntacctgna 660
attttgggna atttccaaaag ccgaagttnn gntccacaaa tnacangnaa agcnttttta 720
aanaatgcnc ccntgggt                                     738
```

<210> 436

<211> 712

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 331, 362, 369, 374, 384, 387, 395, 403, 405, 407, 410, 416,
417, 434, 436, 439, 442, 447, 451, 453, 457, 459, 461, 465, 466, 468,
469, 472, 476, 479, 486, 497, 498, 508, 510, 514, 515, 516, 518, 519, 526, 530,
531, 535, 539, 543, 550

<223> n = A,T,C or G

<221> misc_feature

<222> 551, 554, 559, 560, 564, 566, 570, 571, 572, 573, 575, 585,
589, 590, 591, 593, 595, 603, 604, 606, 607, 611, 612, 622, 627, 628,
629, 631, 632, 633, 636, 639, 642, 647, 648, 650, 651, 652, 653, 654, 657, 659,
660, 662, 664, 665, 666

<223> n = A,T,C or G

<221> misc_feature

<222> 668, 669, 672, 673, 674, 676, 678, 679, 680, 683, 684, 685,
687, 689, 690, 691, 692, 693, 697, 698, 706, 707, 708, 709, 711, 712

<223> n = A,T,C or G

<400> 436

```
gaactttaac ctttcccggg gatcttgatc aactcggag agatgacaca tggttactgt 60
aacatacaa gctacagtaa actacaattc ctgcacacac acacacacac acacacacac 120
acacacacac acacacacac acacacacac acattattg tgcagcctgc agcgatgcac 180
```

```

aaaatcatgc actgaccttc acataaagac tccaggggtg tgcttttatg tgcacttttaa 240
agtgtgtata ttaaggctgc attgcatiaa taagatgttg tgtatatata tgtatggaga 300
gagagagaga gaaagagaga ggggggtgaat nagaggaatg ttttccgtct gccattatta 360
cnccatgtnt gacngccagc ctgnctnttt ctctntctct ctnanancan ccaggntttc 420
tgctccccctt tttntnctnc ancaatntgt ntntctnct ncctnnannc tncctnttnt 480
ttttnttggg aactatnncc acattctntn tgannngnnc ttcgnttgc nccgnattnc 540
ctnttttatn natncattnn tccntncccn nnntnttttt tttnttggnn ntntntttat 600
ttnnccnngct nncctttcag antttgnnng nnaantntnt tncctcnntn nnnnctntnn 660
cntnnntnnt tnnntnccnn cannntngnn nnntttnttt tctttnnnna nn 712

```

<210> 437

<211> 710

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 2, 11, 78, 516, 564, 587, 602, 638, 647, 674, 691

<223> n = A,T,C or G

<400> 437

```

gntacgaatt ngagctcggg acccggggat ccctgtgccca gctctctgtt ctgtgtcact 60
attagagagc ccgctcanag tgaacacatc attaaacctc aataaaaagc ctttattcac 120
ccccaaatta ttacaggaac atgtgtgaac caagcgggca agagagtgtg tgtgtgtgtg 180
tgtgtgtgtg tgtgtgtgtt gagagaggca agttgtaaat gagtgtgtgt tagtaatgca 240
cggggaaaaga cggacagaga gttcacaaag agtactgtat tgctcatata aaagcctttg 300
tattttgtaa tattcttgga agaagcatgt gggatgtgtg gtgtgtgtgc acagtgggtg 360
gtccagtcac gtcaatgtaa tggagcatga tgacttgta ctgtaggtgc cagggaaga 420
gagaaagacg gagtatgatg ggaagagaaa cctagagaga cacagtaaca ccagaaaatg 480
ctacagcaaa actcatccat gtgtgaaata ctttgnttta agatgcttcg gtgggatggg 540
tgctacacac tgggctagt ttgnggctaa ctactaaaat gccatanaaa taaaaagctt 600
gncgcatttc aagggtcttg acctgtacaa aatactanaa aatgccnatt ttctgtgtg 660
gcttttggga tgnctattg aaagaaatgt naaaaaaaaa aaaaaaagcc 710

```

<210> 438

<211> 712

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 4, 16, 19, 36, 535, 542, 591, 597, 608, 632, 638, 652, 655,
668, 680, 692, 703, 705, 708

<223> n = A,T,C or G

<400> 438

```

atangaatga gagctnngnc ccgggggatca aagcanaaag tctgacaaga accgagaaac 60
ctctgagaaa tatatgcaag caagcatgcg cgcacacaca ctttggcaga ggactgcctg 120
tcagaatgcc aaagaaacta ctctttgagc tctccataaa tttactttga aggagtctg 180
actgggtaat agcttgtatg gaaaatactg tcacaagaga aaatacacac acacacacac 240
acacacacac acaaaacaca cacacacaat ctcaaagccc cttattttata atcgcatctg 300
tgacaaaaga attggaagga aacacagcac cactggcatt aattaaagag aatcatattt 360
tatgaagcaa ttctcaggaa gtaagtgcag cactgaccct ccagccccac cccagacaga 420
caatgtcaaa taaattaaca tttaaattag ggcataagacc agaccagtct gggctaggag 480
caacatcacc ctactagcaa cccgccttag caaccgtaa gtaggcctat agtgntggcg 540
anggtactag agcagaactg ggccttgtag aatgtgaaa acacacacac ncaccnctg 600
gtttctgnng gtataccgtg ccctgtcctg gngggtangg ataaactttt tnatnggggg 660

```

caaacatngc agacccttan accttggggg gngtaccac ggngnggncc tt 712

<210> 439

<211> 660

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 497, 518, 537, 572, 615, 617, 625

<223> n = A,T,C or G

<400> 439

```
atctttttta tatttgagtc aaatttctgc aatgtcaggt ttctgaggaa atgcggtata 60
caagtttcag ggcattgctag gagactaaat acagagaggg gatgcaagtg tgaaggggaa 120
gaattgatat ttaccacagg caatattatc agcaattgtg ctgtatgtag tcacacattt 180
tctcaacaca cacacacaca cacacacaca cacacacaca cactgcgctc aaacaccata 240
tattcaaatc tgtcatgtgc caattcttgt ttctatgcta tgttttcatc cgtgtctgtg 300
catctgtata aagcactttg taacactagt taacaaaaag cgatctgtag ataaatctgc 360
cttgaccac tttgttttgc tattttcatt tacactgtgc aagtgggaagc atgggtggagc 420
acgcaggagt gtatcaatat caggacaaat gcaatgcaat gaaagcagct ttagagggtca 480
aatagctctg gtaacangtc taattgaatc tgtgtcangt tctcagtgc ggtcatncac 540
cactgtatgc acaagatgga aatcaatatg tntctcttga atcatgggac acagtctaata 600
ttcattgaag gcttntnttt tttntttttg tacatgtgca ggttaatgaa aggcattgtt 660
```

<210> 440

<211> 714

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 1, 5, 7, 9, 12, 14, 15, 17, 21, 22, 32, 39, 48, 49, 50,
51, 57, 58, 63, 80, 89, 497, 534, 606, 667, 668, 675, 682, 688, 689, 702,
707, 710, 713

<223> n = A,T,C or G

<400> 440

```
ncagnancna cncnncncgg nccccgggga cngctcttna agacacannn nagaatnnca 60
gangacacgg gggcaacacn gaattattana ggactaacat atttatcctg cctccaacaa 120
ccaaaaaacac acacacacac acacacacac acacacacac acacacacac acacacacac 180
acacacaagc agaaacacat gcatacacca gccgccctct catccctcat ctgccagtg 240
cagatcctct agagtcgacc tgcaggcatg caagcttggc actggccgctc gttttacaac 300
gtcgtgactg ggaaaaccct gccgttacct aacttaatcg ccttgacgca catccccctt 360
tcgccagctg gcgtaatagc gaagaggccc gcaccgatcg cccttcccaa cagttgcgca 420
gcctgaatgg cgaatgggag cctgatgcgg tattttctcc ttacgcatct gtgcggtatt 480
tcacaccgcg atatggngca ctctcaagta caatctgctc ttgatgccgc atanttaagc 540
cagccccgac acccgccaac acccgctgac gcgccctgac gggcttggtt gcttcccgcc 600
attcgnnttac agacaagctg tgaccggttc ccgggaagct gcatgtgttc aaaaggtttt 660
caccggnntt caccnaaacc cncgaaanna aaaggggcct tngtganacn ccnt 714
```

<210> 441

<211> 664

<212> DNA

<213> *Roccus saxatilis*

<220>
 <221> misc_feature
 <222> 587, 640
 <223> n = A,T,C or G

<400> 441
 tcagttcagc cacagactga ctggctttta cagtttttacg tgtggtttaa gtgttggtgtt 60
 atttgtgggc actggcattt tctaattcac attaaagaaa ataaaaaaag ttttttttgt 120
 atccttttatg aagaaaactt cctataaata acatttcaga ccctattcca ggactcacac 180
 acacacacac acacacacac acacacacac acacacacac acacacacac acacacacac 240
 acacacacac acacactttt gattaatgct gtgatgcatc agaggttact tacttctaac 300
 tctactcaag gtaagattga agtaaacacac ctcttatttg tttttgtttc attattcaag 360
 ctgttcccta ttttcccag ataaaatcga ttaaaaaaag caaaaggact caaggctgcc 420
 gagctctttc tgggaaaatc agtcagtgtt tccgttcagt gggaaagtcag agaaatcaaa 480
 atcaattcag caacagagaa tgccctttat aatcgcatcg attgggttcct gttattctca 540
 cttgaattgg acttctctct ctctctttgg ctcccgtctt ggttgngac ttacacacct 600
 ttccacacac cccaaacccc cggccagact gttaccgtan ccaaacatgg gtatcttcat 660
 taag 664

<210> 442
 <211> 664
 <212> DNA
 <213> *Roccus saxatilis*

<220>
 <221> misc_feature
 <222> 587, 640
 <223> n = A,T,C or G

<400> 442
 tcagttcagc cacagactga ctggctttta cagtttttacg tgtggtttaa gtgttggtgtt 60
 atttgtgggc actggcattt tctaattcac attaaagaaa ataaaaaaag ttttttttgt 120
 atccttttatg aagaaaactt cctataaata acatttcaga ccctattcca ggactcacac 180
 acacacacac acacacacac acacacacac acacacacac acacacacac acacacacac 240
 acacacacac acacactttt gattaatgct gtgatgcatc agaggttact tacttctaac 300
 tctactcaag gtaagattga agtaaacacac ctcttatttg tttttgtttc attattcaag 360
 ctgttcccta ttttcccag ataaaatcga ttaaaaaaag caaaaggact caaggctgcc 420
 gagctctttc tgggaaaatc agtcagtgtt tccgttcagt gggaaagtcag agaaatcaaa 480
 atcaattcag caacagagaa tgccctttat aatcgcatcg attgggttcct gttattctca 540
 cttgaattgg acttctctct ctctctttgg ctcccgtctt ggttgngac ttacacacct 600
 ttccacacac cccaaacccc cggccagact gttaccgtan ccaaacatgg gtatcttcat 660
 taag 664

<210> 443
 <211> 659
 <212> DNA
 <213> *Roccus saxatilis*

<220>
 <221> misc_feature
 <222> 338, 386, 407, 455, 459, 463, 526, 542, 557, 602, 609, 633,
 648, 659
 <223> n = A,T,C or G

<400> 443
 tatcacgcct gagttatgca atatcacaca catccacacg tacacacaca caggcagaaa 60
 tcataacagt gatggtgacg gtgatgcaag agataaagga gcagtccgca tattacagca 120

```

tggcagcagg tcgacaggcg gtgacagcca ggagagagag agattactgg aacacacaca 180
cacacacaca cacacacaca cacacacaca cacacacaca cacaatctct ctctctcaca 240
cacacataca ggcaactcaga aggtgagata tgtctcccag catagagatg tactctgctg 300
taatctcttt gtctacaaga tacacttaga tggatggnta caggacacag agaggggtgtg 360
tgttgctgcg tatgccgtac gtccantctt cagtctgata aacccanagc cacattttga 420
aaccatttta atataataagt tataagttaa tatgntggnt tanttctata tttgctgggt 480
ttaatatttt taataaatct tggggatttc cttcaagttt ctcttntaca atactcacct 540
gncatatggc atagtantgg gttttacaat atacaaaata tgctctttgc gggcgggaaa 600
tngttgttna aagctgtgtt tgatccccgg gtncccagct cgaattcnta atcatgggn 659

```

<210> 444

<211> 423

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 349, 362

<223> n = A,T,C or G

<400> 444

```

aatggtgtcc tcggagaggg aattacacag ctgaatttcg atgagaacag aagaaaggaa 60
gaggaaggga gaacaagcag aggcggggaa ggcatgtgaa aaggagagaga gggaaggagg 120
atagtatatc cttcaagaaa gaaaaaaaaa aaggagaaat gggaggaaat tggaaaagta 180
tgtagaagac tggactggag tgtgagtgtg cctcgcaaga cttgatgcta aaaacacgca 240
aaagaatttc aaatgaaaaat ccttgaaaaat gaatcctcac gagtgcagtt tgggggtgtgt 300
gtgtgtgtgt gtgtgtgtgc gtgtgtgttg ctggactgtg ataacatcna tatctgtgtg 360
cntttggccc ataatttgtg ctgacaagtg aatgtctgtg cctgtgtctt atttggttgg 420
gat 423

```

<210> 445

<211> 371

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 153, 158, 168, 172, 196, 200, 211, 308, 332, 347, 359

<223> n = A,T,C or G

<400> 445

```

cctccccaaa gcacagtgtat taaaacccac tagagaaact gagacatacc cagagcgggt 60
gtagtccaggc tctattttaca cccagtggat tacttaagtg cgtgcgtgtg tgtgtgtgtg 120
tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgnngcgcna tatgtgtntg cntgcttgcg 180
tgtctttctc ctggcnctgn aagacccttg ngccctctcc accatgtcgc agctgtcatc 240
caatcacaga gggcaaagag ctaatcacat gaccccagag tagagttggc cgtgtcactc 300
gatgccgnct gtatttgtgt tgctattgcc angacatggg tatgcanaca cataaaagng 360
agacgttctc a 371

```

<210> 446

<211> 397

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 89, 191, 219, 250, 264, 275, 329, 377, 385

<223> n = A,T,C or G

<400> 446

```
tagtatgtag catctgaatt agtgctcact cacacacaca cacacacaca cacacacaca 60
cacacacaca cactcgtaat gctgaactng ggtccatcgc tgcccttcat ggtgcattgc 120
attgcagaga ggaagggagg tgtgtatttg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg 180
tgtgtgtgta nacagtgccc tcataaataa ttctactcna tattgctttt aaacgatagc 240
atccccacggn tggcccgccg cggngtgcaa ctcgnccata aatgatactg tcaggggctaa 300
tacacggctt ccattattaa ggaggcacng agcgggtgct gctgcaacgc tgcacccttc 360
gcattcactc cgacagncgg ggcanagcgc caacggc 397
```

<210> 447

<211> 525

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 493

<223> n = A,T,C or G

<400> 447

```
attgacatct cttttatggt tctctctttt ccgatcgag tcagccacct ttcgcttctt 60
acaaaaagag ctcacagtgc agtgatgaac cctagtgcct gtttgtccaa atgtcagcag 120
ttttgtaaac tgcgtgtgta tgtgtgtgtg tgtgcgaact tgtgaaaaaa gaaatctctg 180
gtgcttgtaa ctttttgtgt gtatgcttgc acctttttgt gttcatcaca tagttgtggg 240
tgggtgtttt tggagcagtc acacacacac acacacacac acacacacac acacacatat 300
gcacagtgtg atgtcatgtg catttcctgt acacttagtc tctaattgcag aatgtgggtg 360
taggggaagt ctaaatgatt aatgattgcc tctgtggtct gtctgccaag gctgcagcta 420
taaccagtgt cattctctct tactgtctgc actccatgaa tattgtatag gttatggact 480
tgcttggcgc tgnatcttac cactacttgg gcatgtttta atcct 525
```

<210> 448

<211> 443

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 323

<223> n = A,T,C or G

<400> 448

```
ctcttactcc ccatgtcagt gggctaata gactgacaga atgcaaaaaga gaagagctta 60
tgtacaatgt gtgtgtgtgt gtgttcctgt gtgcgtgcgt gcgtgcgtgc gtgcgtgcgt 120
gcgtgtgtga ctgtgcgaag gtggagggtg cagaaaagta gcctgaagga gggcttagga 180
atatttcagt attggaggac ctctttgact ctactctgct ctacacacag acatacacac 240
accgggtcaaa caaatctcta ttatcaaagt gactctgtaa gtgtgtgtgt gtgtgtgtgt 300
gtgtgtgtgt gtgtgtgtgt ggntgtcatt catgctcata tgacccatac atcccaatcc 360
tcacaggaat tcatgaagaa ttgttggtga gtatggtgcc tttatgatga ttttgataat 420
ctcctgtttt ataaatctga tta 443
```

<210> 449

<211> 180

<212> DNA

<213> *Roccus saxatilis*

<400> 449

attctgtagt tttgggaaga tgaggctttg gctcacaggt atatacacac acacacacac 60
 acacacacac acacatacac acatatatcc actgttcaca cccttcacgt caaacgaagt 120
 gagatggcct agatagttag acggggagac aagcagggtg ttagagggag cagaaaggag 180

<210> 450

<211> 520

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 46, 48

<223> n = A,T,C or G

<400> 450

gcactgcttt ttttaacactg gtttatagcc tgcaggaacc atgacntncc cagatgtctg 60
 tctgtgtatt cccacaccca tgcagcaagc acacacacac acacacacac acacacacac 120
 acgcacacac acatcttagt gaaacaccta gtgaatttat gttcaccctg ttctcacttc 180
 ctcttcttcc tctcttccaa cagttcaggg cttatttctt tcacctcctg ggagtgtggc 240
 aatggagtaa aagaaaagtg agaggaagaa acagggagtt gaagggaaag tgagaacgac 300
 ttgaagggtg cctgagagcg cttttgcttt atggaaaacg ctgaggctaa tcctctgagt 360
 gtcactgccc cctccgcctc cttaaataaga acctttgtgc acggtaagta cagacacatc 420
 tcaatacgtg actatctcag ccccccccc ccccttccc gttgctcacg cagccttgga 480
 aaaacaaaaa aacactaaca atcaactgca tgagctttgc 520

<210> 451

<211> 471

<212> DNA

<213> *Roccus saxatilis*

<400> 451

ctgctgtgac tgacagcctt attaccacac actcctctct tactataaca ccgtgctgcc 60
 tacacacaca cacacacaca cacacacaca cacacacaca cacaccaccc actccctctt 120
 ttttaacctat ccaccggcac tcttctttgc tcacacacac agagcagtct gtcaaact 180
 cttttcttca tcaactgtatt tccagaagaa ttaattatta ctgaaacaga aacaaatatg 240
 aattgtctag caaagggttca actacagttt tttcctacag tctgcaaaca acaggcattt 300
 aggcacaaac atactgtaca gcagcctgat aatgagactt tctttttggg ttactgcat 360
 tattcagatg ttgtgacagt cttatgtgca actgtttcct gtttagggag ttactgttat 420
 tttgtccgtt tttaaagtag ttatttctgg tcagttgact taaaacaact t 471

<210> 452

<211> 506

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 432

<223> n = A,T,C or G

<400> 452

gagagggtgc agtcgtgcta caaggggtgag ggcacactgg acctggcctg gctcaaagtc 60
 aaagatattc cctgcagcag tgcggtgagt actactaaaa tacacacaga cacacacaca 120
 cacacacaca cacacacaca cacacagaca cacagtttac acagtttaat gacagtactg 180
 gggagatatt tactatattg gtggttctct tttcttccac acatactttg cgcgagcat 240

```

gtaacatgta gtgctctaata ctaccagaac agcaggtgtc ttgcagttat gtttattaaa 300
cccactcatt taggaaaagg gtgtttcata ggactgtatt gaaagaaaag ccaatcagtg 360
atgatttcct attgttttaa tcatttctaa ctaaggagacg ctacaggtga gtatctctga 420
gggaaaatca gnttgtgaaa gctctccac atgttactgt aatgagcttg tgtgcactgt 480
gggaggcctt catgaacact atattc 506

```

<210> 453

<211> 428

<212> DNA

<213> *Roccus saxatilis*

<400> 453

```

atcttgagaa aagtaacgat tgcctgtaat tcaggtctgt gttataaatg aaccaaacat 60
gcctgcccgtg tgcagctcaa agaatacacg cagcacgca cgcacgcaac cacgaacaca 120
cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca 180
cacacacata ctgttagatg gtagaatgtg aagccccttg aattactcat gctcagtgtg 240
gagctcaata cacatttgca catagacaca tgggtacaca cactcacata cacgcataca 300
agtacagcat ttaaatcagc aacggcagag tgggcaaacc tggggtacgg aggggtggga 360
gggcagaact ttttgcaggt tatagccaca caaaaagaca cggaggacag gaagaaagaa 420
ggaactgt 428

```

<210> 454

<211> 515

<212> DNA

<213> *Roccus saxatilis*

<400> 454

```

taaagctctc tgggtggaact ataacagcat acccttcctc caatacacac acatacacac 60
acacacacac acacacacac acacacacac acacacacac acacacacac acacacacac 120
acacacacat ctcaatacac aacacataag attcaattca ataaagatga atggaaacttc 180
gtatgtgaac cttgtagtat taatacctca gagtgaacag ttcctatgaa aactgcagac 240
actggagaaa gatgttgctg ctgatttgtt ttatttttatt taaacaccac aaaccaaat 300
ccattctcca cccaataat tgtatttggg tggagcaata aatctcagaa tctgaaaacc 360
ttgaaacaga aaaaccaaag caatctgaat ggatggattt cacttttgtgt gtgttttttt 420
ttttgtaact ggatgaacgg atggtagagt tttaaaaatg atagctatac cttcttttgg 480
gaggcgtaag atgtgctctc ccagctcctg gaagc 515

```

<210> 455

<211> 486

<212> DNA

<213> *Roccus saxatilis*

<400> 455

```

agtattgccc acccaggctg atgaaaccct gtgggtgtgtg ggcagattgt tcacaccgca 60
tctttcagtt gtgcttcctg aacaaaacca ccctctgcac tcccactcgg attgctaaga 120
ggtcaagtac atgcacacac acacacacac acacacacac acacacacac acacactgtg 180
gagaaagaag tcacggttat tctcaagttc tcttttctct tttcactgag attgggggtg 240
cacacaaaaca cattgcaaca gtctctcagg tcacatcaat tcatatgctg accttttcta 300
gggtcagggt tacacacaca cataggcaca aacacacaca cacacacaca aagactttcc 360
caagtgagat tgcagctcta ccaataaggc ctcagggtctg cagcaacagc aaactcccc 420
atagagacca aagccaattt atttcagtcg ggctgctggg gacagaaacg gaagctttaa 480
cagagg 486

```

<210> 456

<211> 426

<212> DNA

<213> *Roccus saxatilis*

<400> 456
 tgtttagcta tcttttgttt ttatgttatt gtgtagtcga tgctgtctgc cacttgaggg 60
 aaaacatttt agataacaca tattaatcat ttatgagttg ataaagtcag aaatactgct 120
 gaaaactttt ttgatgaata aaagcagcag ggtgcctttt ccctacctgt' atcactcaca 180
 ccaacacaca cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca 240
 cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca 300
 cacacacaca cacacacaca cacacacaca cacacaccta cctaggggca ctatagttat 360
 attaggggtt tatgctccaa actgtgatgt gttgaagtgc aacgagtgc cttctgacaa 420
 ggacgg 426

<210> 457
 <211> 271
 <212> DNA
 <213> *Roccus saxatilis*

<400> 457
 ggggcagcgg caggccacag cgcggggcccc tttgtgctgt tcaccagcta gagacgcacg 60
 gacaggagac acagtctaag gcgagagaca ggcttggtgc taatgtctgc tctaactcaa 120
 tagagaggct gcctcgctgc tttggctggc tgctctcact ctctctgatt gaccactcca 180
 ttaaaactgc actgacatga ccgctgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgggag 240
 ggagggttat ccttttagaga tccccgggta c 271

<210> 458
 <211> 514
 <212> DNA
 <213> *Roccus saxatilis*

<220>
 <221> misc_feature
 <222> 496, 499, 514
 <223> n = A,T,C or G

<400> 458
 attcccacca gtttccctcc cagcacggcg cagatgaaga ggatgactta tgccaaacag 60
 gttccctcca ggtaaact gacttcctgt gatggacca acgactccga acagcagagc 120
 gaacagacac actgcgcgcg cgcacacaca cacacacaca cacacacaca cacacacaca 180
 cacacacaca cacagggttaa tacacacagt ctctcagct ctacagtgtt cccctgttgg 240
 agctgaccaa cgggtggccat tttatttgac attttgcaaa ttatgttttt atgttagtac 300
 ttcaactgat ggactgtgtg tgtattaatg tattaacaca cacacagaca cacacacaca 360
 cacacacaca cacacacaca gacacactca ggtaccttta gtaatgacca ggctgaagag 420
 tccatgaggt cgaggacatc tgtccttcag gctgatacaa gacgaacagc aggaggacga 480
 gtcagatgct gccatnttna ttcaaacaca cacn 514

<210> 459
 <211> 495
 <212> DNA
 <213> *Roccus saxatilis*

<220>
 <221> misc_feature
 <222> 397, 436
 <223> n = A,T,C or G

<400> 459
 cagatattgc cccctgtgtg ttgtgattgt aaaaaggcaa ctgcttgcta atgttcacta 60
 tatccacagt gtttccagtt tgttttgccg ccctccagtg gccaaaaaag ttattaatgt 120

```

tgttgtaact aaagagcttg aacctagtat tatttggtga aagacaacct gttacaacat 180
atatagcaca atgtgtatag catgtgcagt aatagccact gtgactgact gactgtgtgt 240
gtgtgtgtgt gtgtgtgtta tgttttcgga gcagtactgc atctggactg acgggctgtg 300
tgcgctgctg ggcagagaga tgggcagtga cctgacacgc agtgacctag atactctcat 360
cagcatggag atgaagctcc gcctcctaga ccttganaac atcacaatcc cagaagcccc 420
gccccccgtg ccgaangagc ctagctcgta taacttcact tacaactaca gctgagtgtg 480
tgtgtgtgtg tgtgt
495

```

<210> 460

<211> 468

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 304, 323

<223> n = A,T,C or G

<400> 460

```

aattcgagct ccgtacccgg ggatctggaa tgatggaaat ggctggaaat ggctgcacaa 60
tcataaggat gcggtggtgg tgtcacagta caatcaggta acatctcggg gatatggaca 120
cttgaagtgg ttagtgcttg agacaggtaa atagtctctc agtgctaaca gcgcttccag 180
ctctttccct gcctgtgtgt atatactcaa gtttccctgg gcgtatgcat gctcctgtac 240
tgtaaacacc tatgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgcctccc ccctcctcct 300
gctnctgtgt gtcggcatgc ggnaaccagc agcactgtaa tcaaactatc actgcgcagg 360
ggaatagcgc tctcttcaag cggctcctgt ttccccctta caccaaaaaac aaataattac 420
tccaccattt ttgggtaaac cataaaccga acgtgtcgcc tgcgctgc
468

```

<210> 461

<211> 478

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 33, 365, 423

<223> n = A,T,C or G

<400> 461

```

ggttctcatt tatgactcac acattgatag tcngtgctga aatagtgtaa atacaaacac 60
acagagacaa tgtggaccat gagtcagtga ctatcataag tgctcaacat ttaaaccatc 120
tagctctgag aaaacctttg cttctttgtt tttgccttta tcgttctgga tgtcagccaa 180
aacagacaaa cacagtcttg gatacacaca cacagacaca cagacagaca cacagacaca 240
cagacacaca gacagacaca cagacacaca cacagacaca cagacacaca gacacacaga 300
cacacacaca gacacacaca cacacacaca cacacacaca cacctgaatg gcccgaggaa 360
cagtngggct gcagggcaat tctaaagaca tgactaaaac ctgttaagtt tccactacac 420
atnctgttgt cctaaacatc tcctgcacct ctgcatgtat gtggattgtg tgctctgt 478

```

<210> 462

<211> 436

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 7

<223> n = A,T,C or G

<400> 462

```

catgttngta gctttttttt tttttttttt ttttttagcta aaccaacatc gtgttagcaa 60
agagccacag aagaacaaac caccaggctt gtttggctaa cagtgcactt tccacatcct 120
cattaactgc acgtaacaac acacacacac acacacacac acacacacac taggctacat 180
ggccaaatgg aaggactcag cttcatttag tcatgggtcaa gcaagccaca taagtttggg 240
caacgtgtga taaagcgaaa gaacgtcagc ttggcccttc gtgtccactt gtcaacacaa 300
acaagtctgg gaggcaactt ttcaaacgtt gaaggagcta gctaaaaagc tacttagcaa 360
gcatgctaac cttcgctagc tgagcattta taaaagtagc aactgaaat ggctgcgttc 420
aaggatcccc gggtagc                                     436

```

<210> 463

<211> 543

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 482, 487, 521

<223> n = A,T,C or G

<400> 463

```

tgtagatgta acgttgtcct tacagcgtgg ttttagactga tttctacaaa gaatttgcag 60
cttcaaccac cgccatcaac ccatctccaa tttgtgtgtt gtatcgtatc tgtcatgcag 120
caatacttcc acgccgtggg tgtggggcctg aagaaaacct tcttgaaaaa gagtccagac 180
ttgcagtctc tgcgctacgc cttgtctctg tacacccagg ccacagacaa gctcatcagg 240
aagtttgtcc tctcacagag cgctcagggt gcgacttcaa acagcaacaa cacacacaca 300
cacacacaca cacacacaca cacacacaca cacacacaca cactgtcaca cagcagggtc 360
aaatgatatt acacaaaatg tttcacttac tctcaaagag ctccactgct tattcttact 420
aaaagtaagg cttatggaat taaatgggat tatgagatta aatagaataa cttgggttacc 480
gngttgnaat gtttaattca ttgctacagt gaattacaat naccatacca agcagattca 540
aaa                                               543

```

<210> 464

<211> 535

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 447, 515, 520

<223> n = A,T,C or G

<400> 464

```

ctatctgtgt cctgccataa ctttatcaac acttaaatca gagctttaat cttatctgac 60
ccccccccc ccatcgtctg tgtctgctag gtcagctgac ttcctgctca gagactggct 120
cacttctctg ctgcgtcatt ttcctctctt accgccactg tgatgacgtg ttgtgttcaa 180
atctctgata cctgatctga cataatcgca cggctctcta ttgggctgct gatggctgct 240
tattggcctc tgggctgtgt ttacaggaa gatattgatg gtttgatatt agcttcttac 300
tggcaaatat acacacacac acacacacac acacacacac acagacacaa atctgcctct 360
tagttattga tgagctaata tctgtgatta tttgtagtgc acaaagaaag acaactgtcc 420
aaattatcat catgtagagt acagtantgt gtgtgtgtgt gcgtgtgtgt gtgtgtgtgt 480
gtgtgtgtgt tttgaaaacc gttatctgtt acacncccn atccgataag gaaaa 535

```

<210> 465

<211> 516

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 507

<223> n = A,T,C or G

<400> 465

```

gtaggaatga gcagcccggtg acatgggtta atttactgga cctaggaagg ttcattgttt 60
cctgtcattc ctgaactcat cgcactgacc tttaccgccc tgtcctgcgc tgtgcgtgtg 120
tacacatgga catgtgcatg cacacacaca cacacgcacg cacacacaca cacacacaca 180
cacacaccaa ctacaaatgt atactgtctc aatgactaca ctgctcactg cctaaccaca 240
gaaagagaaa aagtgaagagc gacacattga caaacagatg gacagataaa gacaaagagc 300
aaccacccctt tcaactgtcc aaaagtatcc ttgaattcca gaaagtttca cattattttc 360
tacaataata aaaaaaacac accagaatac cccaagggga aaagaaaacc agtatacaga 420
aggttagctg tctatctgct agtaacctat taaggacaat tatagaggcc tatgattgat 480
aaatagatga cctcaaggcc aaatttnaac tatatt 516

```

<210> 466

<211> 553

<212> DNA

<213> *Roccus saxatilis*

<400> 466

```

aacaatgcag ctggctgggtg cttcattttca tccgagatac tgtggtgtta atgagggccc 60
cagggaccgg cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca 120
cacacacaca cacatgttta cacagatact gtacatgtag gtgtttgtac aggtgtttgc 180
agtgaagtaga caccagctca tgctgtacta tcatttacat tatcatttac tctgatacaa 240
taaagagcaa aaaaacccaa aatgtgcaac aacctacaga cgaccactt attcaaatat 300
gtaccaaaca aacaaacaaa aggggtacaga tttaatccga catgaagcac aaagaaacag 360
cagataaaaac tgcaaaaaaaa ctgaagcatg acacaggatg aaaccactaa cagttttatac 420
atttactttta agagctcagt aaggctgagt cagcaaaaaa acataactaaa tccataattt 480
aatgatttaa tttttgtcct taaagatgag aactaaacac ataaaaagtt gtaaggtaat 540
gtaatactta ttt 553

```

<210> 467

<211> 432

<212> DNA

<213> *Roccus saxatilis*

<400> 467

```

agattagaga gatactggag gatacaggag ttagtttata tatgtgtgtg tgtgtgtgtg 60
tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg ttcactgcaa agcatcattt cttgtctaaa 120
aagaaaaata atcttgtcaa gcattattgc attagacatt tttgttttaa gaaaatattt 180
tagttttgtc ttaataaaat attccagcta atattgagct agatttaaca ataagttaag 240
acaatggttt gcataaatatt ccagcagagg aacacaagta ttttccttat tttaagaata 300
agactagaga aagtagtcta gtgaccaaaa tacttaagtc tatcttaaat aactgagttt 360
tcattgtttg taagcacaac ttttttactt ttttctagtt ttaagacca ttacagtgtg 420
tcagtgggtta ga 432

```

<210> 468

<211> 549

<212> DNA

<213> *Roccus saxatilis*

<400> 468

```

cccgggtata ttctatcaac cattaattac tcaaaataat gtttagttca ataaatatat 60

```

```

gtattgatag gtaatatcat tatagttcaa tgcatttcat gtctaagtta ggccatttaa 120
tcatgcaaat tgttttgttt ttgagaatta aagaaaaaca atgtttacaa aatgcaacat 180
attaatcata agaagtgttt ttaaaaatga gacacgctgc gaataccgac agtaaaagct 240
gcattgcaat aaataaataa aaaaaacatc gccatatatc ttaaaatctg actttgttac 300
taatgaattg ccctaaaaag acacgcagat aaccggcacg gattgtctcc cactcatccc 360
aaataaatat ataaaggatg ggtggacaaa aaccacgcct ttcaagagat gatgacgagc 420
acctgtgacc cccgcaacat ttttcacaca cacgcacaca cacacacaca cacacacaca 480
cacatacaca cacacacaca cacacataca ctcgccacat tgtaacgct ggagacaaga 540
gtacagcaa 549

```

<210> 469

<211> 452

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 347, 352, 362

<223> n = A,T,C or G

<400> 469

```

ttaaaactga tgagaaaact aagaaacatg caggggtgcg accctcccct tggcattgac 60
cgccctctcc ctcccatgg acactcttgt gtgaatttgg agcaaagccc cctggataaa 120
tggaagggtt aatgtaatcc ctataaaatc ctgttcatgc tgctactctt tctctctttc 180
tgcctctccc tctcctcttt cattcattcc tgctctccca gggagcacgt taaatgggta 240
acggcggggc caagcgcgag gtgtaaaccg caaagagatg gggctaagtg ttgggagcgt 300
gggaccacaa gctccacgtg tgtgtgtgtg tgtgtgtgtg tgtgtgngcg angagagatt 360
ancccccttt taaagagccc gcttttaatc tggctacacc ctcgtctctc ccgctttccc 420
agtctatctt tctcggtgac agtgaaactt tt 452

```

<210> 470

<211> 639

<212> DNA

<213> *Roccus saxatilis*

<220>

<221> misc_feature

<222> 529, 591, 600

<223> n = A,T,C or G

<400> 470

```

tcctcggagc ggatgccacc ctccgtgttt tgcaggctgc cgctctctga tggaaagctc 60
tgaataacaa agacatgttt gagagcagca gcggcatcag cagcagcagc agcagcagca 120
gcagtctggg ctgagcgctg acgtcaagga gccatgactg tgccaagcag catccagact 180
ccagtccacc acaaacacac acacacacac acacacacac acacacacac acacacacac 240
acacacacac acaaacacat tgacctgctg ctgacctgtg ggctgtttg gaagcaccct 300
atgtcaaaag ttagaaacac accaccctgc gtgctgtgat tgactcttca aagttggcct 360
gtgattaggg tcagagtggg gttttcgctc tcagaatact cttattgcag aagtcaccgc 420
acaagtgata cactctgggtg gtgtgtttgg agtccccctg cttttttctg gtctgtgtgt 480
ctatccccag ctgtctaagt taggggggag ggataggctg gaacaatang cgccatttgt 540
cctgctaaaa ggggacagga agcatttgat tttcagcctg ttccaagctt ntaagccatn 600
ccttgaattg gctaaatggg aacattttcc ttctaacgg 639

```

<210> 471

<211> 624

<212> DNA

<213> *Roccus saxatilis*

<220>
 <221> misc_feature
 <222> 514, 524, 539, 549
 <223> n = A,T,C or G

<400> 471
 tttgaaaccg ggcacccaac tgctctcttt ctttcactct ccctctctct gaattgtcaa 60
 cctattaaat gtctctttgt atctcgccca ttcacacaca aactgaccaa tggaaagctt 120
 tggacccttt cagtgcacagg gtgtgtgtgt gtgtgtgtgt gtgtgtgtga gattgtcata 180
 acggagctgt cccagttctt tttgtacatt gattgcacca atgttatttt actagtttag 240
 aaagcagatg tcaactgcatg tgtgctgtgt tgagagagtg tttgtgaatg agactgacag 300
 agactgtgag ggtggtgtgt atgtggtaga gttacatgaa gaacaatagc cttattgtac 360
 ctgtctgctg ctactgtctg tcttgtgtcg atgctctgca ctgagcctat ttgcctcatt 420
 ctttgtgtaa ccgatcacac atttgtgaat aaagtctgac atttctgagt tatatcatac 480
 acttgaagc tctctggtgg cttaagtggg gcanggttcc ccantgtatt ggaactaant 540
 atcaccagng gatgttttct accaacactg gcttcgacta ttattcagta ttgctcttgc 600
 atttaacact acatgggcga acat 624

<210> 472
 <211> 630
 <212> DNA
 <213> *Roccus saxatilis*

<220>
 <221> misc_feature
 <222> 420, 510, 534, 630
 <223> n = A,T,C or G

<400> 472
 ctggttagtc ctgtacgtgt ttgtctcctc taaaagtaac caaataccag tctacttgcc 60
 actcttgaat aactctctga ccgactggac tgctgagaag gttgtgagag tgtgtccaga 120
 ttcataatgt tgtgtgtgtg tgtgtgtgtg tgtatcaaac agaagagaaa atgctaaaag 180
 tcatgcaaga cagcgggaata aagctggaat agcaacaagg gagaaactgg atggcaatga 240
 agtgagtga cagacagggtt attggcagca gagggaaagt aaaaggctgg atgtccattg 300
 aagacgtaga tgaaggaaaag agaaggtgct tttagtagct aaaaggagag gaagagtgcc 360
 agaaatataa aaactacaca gtttaaatgt tggtaacagg ggaaccacag ttagagaggn 420
 ttatgttcat ctttaattggc tctttccctg taacccatag tggaccaatc ttgaacttgg 480
 cttcttataa atcatcatca tctgaatcan aagttagtga taagtgtctt tccngggggg 540
 tgggtctctcc aaaaaaggct ttattttgtc acatgggcca ttacggcatt taacgtgcat 600
 ggccggtcct taagcaagct acttggctgn 630

<210> 473
 <211> 805
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 3, 7, 12, 14, 15, 18, 43, 99, 133, 556, 670, 677, 718, 727,
 740, 753, 755, 771, 794, 805
 <223> n = A,T,C or G

<400> 473
 tngtntnttc cnannganct ctttgaagcc cccctcgagg ttnacggtat cgataagctt 60
 gatatcgaat tctgcagcc ccctgaggga cgggcgcgna cacacacaca cacacacgca 120
 cacacacgca canacacaca cacacacaca cacacacaca cacacactta ctcttactct 180

```

tactgtagtg gcgagggtgt atttgatgct gatgacgggc aaccgagcat cgatctgcac 240
acacacacac acacacacac acacacacac acacacacac acacacacac acacacacac 300
acacacacag agggcgaggg ggcgacgggt gcaacagtcc agttgcggtc gaggcattgt 360
ggtgggtggt tggcgggctt ccgagtcggt ttgtgcctcc tctaactcgt cttctcctgg 420
caggactgac agaccgacac aaagtcacgc aggaaagaag cacggccttag gatggcgagt 480
gcggcgccag ccaggaagcc gtgggggatc cactagtctt agagcggccg ccaccgcggt 540
ggagctccaa ttcgcnctat agtgagtcgt attacgcgcg ctactggtcc gttgtttttac 600
aacggtcgtg actgggaaaa ccctggcggt acccaactta atcgcccttg gagcaaaatt 660
cccccttttn gccaggntgg cgtaaataa gcgaaagaag gccccgaacc ggattcgncc 720
ctttccnaaa aggttgcccn caatccttga atnngcgaaa tgggaaattt ntaagcgttt 780
aaatattttt ggtnaaaaat tcgcn                                     805

```

<210> 474

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 474

tagtggcgag ggtgtatttg a 21

<210> 475

<211> 17

<212> DNA

<213> *Oreochromis niloticus*

<400> 475

cgaccgcaac tggactg 17

<210> 476

<211> 390

<212> DNA

<213> *Oreochromis niloticus*

<400> 476

```

tgccccacag ctctctgacc cgctctgttc ccttcctgca cacacacaat gcattaaata 60
aacacacaca cacacacaca cacacacaca cagcactgga gacgcacatg gagtcccagt 120
gaggcaggat ctcatgtgtc caggtgacca tggcggttga gatgctgtcc tcctgccggt 180
gtctctcctt catctgacgc ttcttcctct gggcttcttt cagctctgaa ggagacgcaa 240
cagcacgagc caatcaaata caagaacagc accagccagt gacctcaata cgtgtgtgtg 300
tgtgtgtgtg tgtgtgtacc tctcctcttg gctcctgcca ccatctcctc gtactccagc 360
ttgtgtctct tgagtttcct ctgtagattt                                     390

```

<210> 477

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 477

ccttcctgca cacacacaat 20

<210> 478

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 478

gctggtgctg ttcttggatt 20

<210> 479
 <211> 338
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 479
 agtgtccgga tggctaagag tctctgtcag caactactgc aagacacatg tagcgctcta 60
 gataagggtgt gtgcacatgt gcgtgaattt aactctgtcc ctgttttgca gcacatcacc 120
 tgattccttt ttctcctgca ctgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt 180
 gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgttaggt 240
 ctcacacctc ctccatcaat gtgagcagcc aattagggag cagctaaatg tggtaagtc 300
 actgtggcag gaagagaggt gcatcctggg aagctgcc 338

<210> 480
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 480
 gttttgcagc acatcacctg 20

<210> 481
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 481
 gccacagtga cttgaccaca 20

<210> 482
 <211> 365
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 3, 9, 12, 14, 22, 42
 <223> n = A,T,C or G

<400> 482
 ttntttctnc cnanaagatc cnttggaacc ccgccccttt tngaggtcga cccgtatcga 60
 taagcttgat atcgaattcc tgcagccccc ctcaaaaagt caactacagt aacaatgatt 120
 tgatgtcatt aagaggaatg tgctagaaga ttacatagc atggatcaga ttactggatc 180
 acagatcaca gaattatgga tttatagctc ctgtgggtgac ttaactcaat cggatgtcct 240
 cataactata gaaaaacact attctctctg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg 300
 tgtgtgtgtg tgtgtgagac tttgtaatgg tggctttcaa agacaagtgg acatgaacca 360
 atggt 365

<210> 483
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 483
 ccctcaaaag tgcaactaca g 21

<210> 484
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 484
 tgaaagccac cattacaaaag t 21

<210> 485
 <211> 239
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 80
 <223> n = A,T,C or G

<400> 485
 ccataataca cacacaaaca actaagcaca cacacacaca cacacctttc cttgcttaca 60
 gtgggtcttc ctgtagttgn ggcgctctgc cgaacaaaca cagagcaaca atacagtact 120
 ggctaattctg tgatcctaag gaacatcaag ttctggaaac acagccaaac gcctgcgcgc 180
 acacgcacac acagacacac acacacacac acgggtgaac aaacagctat cccagacat 239

<210> 486
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 486
 tgcttacagt gggctcttcct g 21

<210> 487
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 487
 tgggatagct gtttggtcac c 21

<210> 488
 <211> 613
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 4, 8, 17, 595, 613
 <223> n = A,T,C or G

<400> 488
 ttgntttnat gaccgtnagc tccaccgcgg tggcggccgc tctagaacta gtggatcccc 60
 cccaagagca gatgctgctg ctatgaagat agatcacagt gggcgccaccg tttccttcct 120
 gcgtgctgtg atgctggggt atccagacac cgcgcgcgcg tgtgtgtgtg tgtgtgtgtg 180
 cgtgtgtgtg tgtgtgtgtg tgtgagaaag aggaagtaaa aagaaagccc aaaatggtga 240
 gtgtcttctt ttgcagctat atacatgtgc attgtagagt atttggattt gtttttggtt 300
 tatttctttt ttctttctca tgcacagcta tatgacaatt tactaataaa ttatagctgc 360

atgtgaatgt cctacaaatg tgtctgcctg gctgtgccct attgatcagc cagattgcac 420
 ctggggctcc ggatggatga ccctctatta ggctgtcgga atcccagtaa agaacatctc 480
 agcagctggg gggctgcagg aattcgatat caagcttatc gatacccgtc gacctcgagg 540
 gggggccccc gtaccagct ttttggtccc tttagtggaa gggttaaatt gcccnctttg 600
 gcgtaatcat ggn 613

<210> 489
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 489
 agatgctgct gctatgaaga t 21

<210> 490
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 490
 gctgcaaaag aagacactca 20

<210> 491
 <211> 413
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 491
 atctgactgt agcaaatttg ctaaccagtc agtgtcattg caattcttca gatacatgaa 60
 acatttctgt ggcactggta catgagacat acttaccaa ttccacagca tatttctctc 120
 cgaggctctt gccatctttt tttttttttt taagctatgc agaagggtgc agtggttcta 180
 ctggaaaactg tttatcctcc aaacagcctg cttaaaatca atattttacc tccaatctcc 240
 agttactatt ccaactgctct tctttgtctg ctgtgtgtgt gtgtgtgtgt gtgtgtgtct 300
 gtgtgtgctg aaagtgtgtg tacagctgtg cacaaatgca aatgattaca aagagccccg 360
 acacagacat tgaaatacct gctgatatgc ttaaagttga tatgatagta gat 413

<210> 492
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 492
 tgcagaaggt tgcagtgttt 20

<210> 493
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 493
 gtcggggctc tttgtaatca 20

<210> 494
 <211> 835
 <212> DNA
 <213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 5, 6, 7, 24, 32, 39, 550, 627, 662, 676, 677, 694, 696,
701, 713, 737, 762, 785, 811, 812, 817, 820, 827

<223> n = A,T,C or G

<400> 494

```

ttgtnnnccc tttgatgcct ttgnacgcgg cncggccgnt ctagaactag tggatccccc 60
cccaatcaaa ttaaccagag caacatgctg ccactcagtt tttcattgac atgctgccgt 120
gtcatcgcct cctggagggc accatctcta aggaaacagc ttttttcacc tagaaagcac 180
acacacacac acacacacac acacacacac acacacactc attatttcta atgagattgt 240
aaaagttaga ggagagaagt tatattaact cttctagtag acaaagacct ctgtatctca 300
cgatcatctc agctagaagc caagacatta ctttcttcaa atagaagctt ctctattaaa 360
tttactctgt tgtgcatgcc ctctgtaaac acatctgtgg aataatattt cacatttgtc 420
ccctttaaca tggaaagtcta aatggactga cgtagctctg gagcagggtg caagtggggg 480
ctgcaggaat tcgatatcaa gcttatcgat accgtcgacc tcgagggggg gcccgggtacc 540
cagcttttgn tcccttttagt gaggggttaat tgcgcgcttg gcgtaatcat ggtcatagct 600
ggttcctggg gtgaaaaatgt tatccgntca caatttcaca caacataccg agcccgggaag 660
cntaaaaggg gtaaanncctt ggggggtgccc taangngggg ngctaactca cantaattgg 720
gggttgcgct cacttgnccc gttttccaat cgggaaaacc tnttggggcc aacttggatt 780
taaangaatt ggccaacccc cggggagaag nntttcngan ttgggcnctc ttcct 835

```

<210> 495

<211> 19

<212> DNA

<213> *Oreochromis niloticus*

<400> 495

ggcaccatct ctaaggaaa 19

<210> 496

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 496

taaaggggac aaatgtgaaa t 21

<210> 497

<211> 317

<212> DNA

<213> *Oreochromis niloticus*

<400> 497

```

ccatccatga aaccatttga ctcctaaagc aactgttaa gtgagaggat gcacttctcc 60
ttgatttaaa tgagcagcgg gtatcagcag tttagctcct gcagagcatg agctccacac 120
acacacacac acacacacac acgcttacac attgtcacat aagagaagtt atctacttgt 180
tgctgtatgg agagctaaag cttctgttat gaaaaatggg ctattatctt cttattgatc 240
acattgttga tgagacaaat ggcggaactg atagatgggg ttttatcacc ttaactgttg 300
tcagtatgaa tatggat 317

```

<210> 498

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 498

```

aatgagcag cgggtatcag                                     20

<210> 499
<211> 20
<212> DNA
<213> Oreochromis niloticus

<400> 499
gttccgccat ttgtctcatc                                     20

<210> 500
<211> 605
<212> DNA
<213> Oreochromis niloticus

<220>
<221> misc_feature
<222> 2, 3, 4, 5, 15, 30, 394, 420, 452, 467, 470, 476, 483, 489,
      502, 505, 508, 515, 517, 519, 525, 534, 535, 541, 543, 548, 551, 552,
      553, 554, 560, 570, 573, 575, 577, 585, 592, 593, 594, 595, 599, 603, 604
<223> n = A,T,C or G

<400> 500
tnnnnctctg aacantcttt ggcctttccn gccccttctc gaggtcgacg gtatcgataa 60
gcttgatata gaattcctgc agccctttag cactgatgtg agttagcaga agatctggca 120
gaggctctgt gtgaatgctg gtcttatatg ctgggtggctt gattggaacc aggctggag 180
actgattgga ggctctgcct gaaggtggag cccagtggag tggaaaaacc ccacactcac 240
ccagaccata acatatagtt ggtttacaca gctttgtgta tgtatgtgta tgcattgtgta 300
atgtatgtat agacacgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt 360
gtgtgtgatt tacattgctg tgcttgagag ccancatcta ccggaaccaa attccttgn 420
tttgtctgca catatacttg ggggggatcc anttgttcta ggcggnncgn caccngggtg 480
gancctcant tcgccctata gngantcnta ttacnncnc ttcanttggc cgtnnntttt 540
ncnaactntc nnnnacttgn gaaaaaccn tgnngntta cccancttta annnncttnc 600
tannc                                                    605

<210> 501
<211> 18
<212> DNA
<213> Oreochromis niloticus

<400> 501
gtggagccca gtggagtg                                         18

<210> 502
<211> 21
<212> DNA
<213> Oreochromis niloticus

<400> 502
atttggttcc ggtagatggt g                                     21

<210> 503
<211> 570
<212> DNA
<213> Oreochromis niloticus

<220>

```

<221> misc_feature

<222> 9, 19, 40, 46, 111, 113, 511, 570

<223> n = A,T,C or G

<400> 503

```

tggactccng agcccttgna acccccctcg aggtcgacgn tatcgntaag cttgatatcg 60
aattcctgca gccccctatt cattccttaa tcatctgttc atccatatat ngngggatc 120
catacatcat cgatccatcc tctcttggtta tcatctgttc ttccccctct gcccgaactc 180
atctctctct ctgccctctc tacatccatt cattcatcca aatctcaatc cctccatccc 240
aatatcgatc catgcacaca aacattcatc tatccactat gaatatatct atccaaccat 300
ccttccttcc tgctctccct ccttcctccc ttgggtcctt atcccagtcg aaaggcttct 360
acagcaagac ttaacacgct ccactacctc cccgtccctg catgtgaaca cacgcacgca 420
cgcacacaca cacacacaca caaaggcagt ccctacagga tgcaagactc 480
aaagacacac aggacatcgt tttcacagct ncctgagcaa ctcaaagggg gggggaacca 540
ctagttctaa gagcgggcgc caccgcgggn

```

<210> 504

<211> 19

<212> DNA

<213> *Oreochromis niloticus*

<400> 504

```

ctgcatcctg tagggactg

```

19

<210> 505

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 505

```

caagacttaa cacgctccac t

```

21

<210> 506

<211> 345

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 38, 231

<223> n = A,T,C or G

<400> 506

```

aaatcacaca tatgtgcaca cataccacac gcgcgcanac acacacacag gcgggtatcc 60
ccgaccctgg gggagctgct tggttctccc aactcgcgtg tcattttttt tttttttttt 120
tcttactgca gtgtttttaga acattttatc taaactctgg aggatcgggc tggggtttcc 180
cctagtaaca cacacacaca cacacacgca cacacacaca cacagtgtt ntccaaaggc 240
tctccctgtc cttggcaagg acacattgaa ctgcgggact cctgccatac atagaaacac 300
acacacacac acacacacac acacggacac tcattcaciaa aatga

```

345

<210> 507

<211> 17

<212> DNA

<213> *Oreochromis niloticus*

<400> 507

```

gatcgggctg ggggttcc

```

17

<210> 508
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 508
 agtcccgcag ttcaatgtgt c 21

<210> 509
 <211> 335
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 127, 287, 322
 <223> n = A,T,C or G

<400> 509
 gggatcaaac aggcagattt gccacgcctg acacccctgc tgctgcaagt gtgtgttttg 60
 tgtatgtgtg tgtgtgtgtg tgtgaactca gctcggactc agtaatgaca ggatttggtta 120
 aacagtnaat taatgaataa tgaaatatcc agcacgcgcc tgccttgcct ggagcacagc 180
 gccccgagca ggaattactc ccgaccggca ctccggctgtc tgcattgctgg ataacctgag 240
 cgtgcgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtt ggataancat ttttacagcc 300
 cattgcgtga cagaacgccg angggctttg ctgat 335

<210> 510
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 510
 gtgaactcag ctccggactca 20

<210> 511
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 511
 acgcaatggg ctgtaaaaat 20

<210> 512
 <211> 416
 <212> DNA
 <213> Oreochromis niloticus

<400> 512
 tgccctgtat gattttataac tgtgggtctg tcagtgttta ctgccaaaaa ttggcttggtt 60
 tcagcaataa catgcataca cacacacaca cacacacaca cacacacaca aacacaccct 120
 cactcacatg aaaacatcag accaaccaca atggaccttt ctcccacatt tttacctcac 180
 tctcagtggg atttcagctt cacggctgct ttcaaatcca aaaactttgt acctcccagg 240
 tttcctcgtc attgcttcgg agccagcaga agacatggag cggcaagctg gaaaagaata 300
 cacgcagaaa cctgaacaca cccatgtttt atatttgaag tttggaaagt ttttttatgc 360
 accttaaaaa tctggcaatc tcacaaacct caaaagactg aagttaaatt ctctcc 416

<210> 513
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 513
 ctgccaaaaa ttggcttggt 20

<210> 514
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 514
 gaagcaatga cgaggaaacc 20

<210> 515
 <211> 437
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 515
 ccgagctggg ggacatgggg caggggggtgg ggggcttgga cacacactgt gagctgtagt 60
 tgtcctgtga tacaacacac acacacacac acacacacac acacacacac acacacacac 120
 acatatatca gaaggagctg tttcttcttc aggttttcat tctcacagcc agcaccagtc 180
 taggttgag cgctgcagt cagctgacag tagaaacaac atgtctgcca gcagctgggt 240
 aactgcagag aaccagccgc tgctctctgg ttaattgcag cgaacactga agtgtgtgta 300
 tgtgtgtgtc tttgttagag acgacaggaa aggagtgaag acacacactc gtgtggctgg 360
 ttctacttgg ttttcggtgt gtgctgctct ggatgtgaag cctttgctaa actaaccaca 420
 cagcctggta cgggtggg 437

<210> 516
 <211> 18
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 516
 ggggcttgga cacacact 18

<210> 517
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 517
 ctgctggcag acatgttggt 20

<210> 518
 <211> 193
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 518
 ccgttttccc ctctactgcc tccacaccca gcctgcatgt ttgttatgct gccttcaggc 60
 ttggtttgga aatgtgggcg tttttgtgtg tgtgtgtgtg tgtgtgtgtg tgtgcctgtg 120
 tgtgggagaa ttgctgcaca ttaacaaccc gacaaaatgg aaagtagtgc cgggactttt 180
 tgcttgataa gca 193

<210> 519
 <211> 19
 <212> DNA
 <213> Oreochromis niloticus

<400> 519
 ccgttttccc ctctactgc 19

<210> 520
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 520
 aagtcccggc actactttcc 20

<210> 521
 <211> 607
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 6, 18, 19, 26, 488, 571, 580, 594
 <223> n = A,T,C or G

<400> 521
 ttgaancctt ggaacccnng gtggcngccg ctctagaact agtggatccc ccctgattgt 60
 gtgattcaaa ccagctgaat gtggcagcca tgccccagag catcatggga actgaagtct 120
 ctagattcag tctgccgagt agttcttata gattattatt gatcccagca gcaggagagg 180
 tgtgtgtgtg tgtgtgtgtg tgtcagactc gaacatgatc tcaagtcacg tgcctcttaa 240
 tcactatagg aaccagctga tgtgttgcac aagacagggt gtgggggttat cgagatgaca 300
 tcatcatact gcttagttta cagaaaaatg tgtgacaacc atccgttctg ctttgcgat 360
 gccaatgtgg acccagaccc ctgccccact gtttccaaat atcttgagct catctacagc 420
 tgtgaacaaa aaggtaactt ctccatcggt ttttctaaac attttcatgt agtattacat 480
 atttatcntg agttagtgca attccggctt tcatgctttt gtgctttgaa tgctcagtg 540
 gcctgcatgg cttgggtctt gaacatgggc nacatcttan aatgccatgc tctntgcttt 600
 ctttctc 607

<210> 522
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 522
 gattcagtct gccgagtagt 20

<210> 523
 <211> 18
 <212> DNA
 <213> Oreochromis niloticus

<400> 523
 gaggcacgtg acttgaga 18

<210> 524

<211> 616
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 7, 10, 13, 19, 26, 27, 30, 31, 37, 47, 73, 74, 75, 78, 492,
 607, 609
 <223> n = A,T,C or G

<400> 524
 aggaggngtn acntatttnt atatcnnggn ngtgaaanagg ttctcctnttt ggttaagggc 60
 ccaccgtatc gannngcngg atatcgaatt cctgcagccc actgtgggct gggtgcgtgt 120
 gctgcagagt tcggagcaga aactaggaca ccctgagatc aacaggaaac caaaaccctc 180
 cgtctactga catcatgacc cagaaacacc cacccccaca cacatacaca cacagagtga 240
 aggagaagtt ggctcacctt gggaaggctc cctcctcggg ctccctgctc tctctctctc 300
 acacacacac acacacacac aaactccatc cataactctt catcactttg ctgaccatca 360
 tcatcctaag gaggttcgtc tcacctcagc caaggagggg gggatccact agttctagag 420
 cggccgccac cgcggtggag ctccaattcg ccctatagtg agtcgtatta cgcgcgctca 480
 ctggccgtcg tnttacaacg tcgggactgg gaaaaccctg gcgttaccca acttaatcgc 540
 cttgcagcac atcccccttt cgccagctgg ccgtaatagc gaagaggccc cgcaccgatc 600
 gcccttnchna acagtc 616

<210> 525
 <211> 16
 <212> DNA
 <213> Oreochromis niloticus

<400> 525
 ctgggtgcgt gtgctg 16

<210> 526
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 526
 cctccttagg atgatgatgg t 21

<210> 527
 <211> 515
 <212> DNA
 <213> Oreochromis niloticus

<400> 527
 tctttgataa ttaaggtgtg attctcagag aaatagaatc ttgcataacc agacttttct 60
 ctacaacact ttaaaagctt ttctggcaga atttgtgaac agaaatgcaa ggatgccct 120
 gttagatcac atattatttt tcgctcttta aaaccattca gcaaaagaac caaaccctta 180
 caggtttctg cagcatccaa atcttcatca aaacttgcca tttggagtgt acaggttact 240
 agcttaagac agtcttatgc caacagtcta caacttatca gttagacaag gttattttata 300
 taccacacag ttggcaagtc aattatctgg caacacctgc aacacgaaga tgaaacagt 360
 tttcaacaa atctgcaaaa atgtcagtga aaattacaga ttactaaagg ggtgcgcgca 420
 cgtcacgcac atgcatgcac acacacacac acacacacac acacacaaaa tcaaaggcag 480
 tgaagatcca aaatggaaag catcacagct atagg 515

<210> 528
 <211> 20

<212> DNA
 <213> *Oreochromis niloticus*

<400> 528
 ttatctggca acacctgcaa 20

<210> 529
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 529
 tgtgatgctt tccattttgg 20

<210> 530
 <211> 612
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 3, 4, 5, 7, 15, 20, 25, 26, 27, 46, 433, 470, 476, 489,
 496, 498, 519, 531, 545, 550, 553, 558, 565, 567, 574, 580, 591, 597,
 600, 602, 609
 <223> n = A,T,C or G

<400> 530
 ttnnntnttt gatanganan acctnnntaa acgccccggc gttttntcta gaactagtgg 60
 atcccccca aaggtcagaa agagaaacac ctttctttgc cggctcttca cgcttcactg 120
 atgacatttc agtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgagag 180
 agagagagag agagtcagag agagtgtgtg tgtttgtgtg catacctgta ttaatcatgc 240
 tgtgagtga ctgctctgtt tggtcatact gttaaaataa ctcatataat tacttgcatc 300
 cttactttac tttctcaacc atctattctc ttctgctcat ccttatcagg gctgcagggg 360
 ggctggagcc aatcccagct accatagagc aacaggcaga atgcaccctg gacaggtcgc 420
 cagtctgtca canagagaca gacagtcatt tttcaccagt ttaaaatccn aattanccta 480
 accccactna ccccgntnaa gggcttttga ccatggggang aaacccccagt ncccccaagg 540
 tccncaccn acntgtgnaa aaacntntaa actnttcacn ccaaaagggc nccccgnaan 600
 tnccccccnc ct 612

<210> 531
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 531
 acgcttcact gatgacattt c 21

<210> 532
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 532
 ccctgataag gatgagcaga 20

<210> 533
 <211> 618

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 13, 24, 29, 91, 118, 398, 517, 539, 541, 542, 547, 552,
566, 567, 569, 573, 576, 578, 579, 580, 591, 592, 597, 601

<223> n = A,T,C or G

<400> 533

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ctctcctttg gtnggagatc tacnggaang cccttcgttt ggggaaaagta cccataagct 60
tgatatcgaa ttcctgcagc ccactctggg ntagtagaaa agcgctatat aagaatgngg 120
ggatttacaa gtccaatgtg taaacacatc ttcctcattc attattcttt gtcaaacc aa 180
caaagtgcag ccaaataattt ttaattaagc aattgtgtgt tccttgaaca gcctagattc 240
aaacagatct aatttagcat gtcagtgtgt cctattgctt attatctttt attgacaaca 300
gtgggatgaa cctgggcacg tgcacgcaca cacacacaca cacacacaca cacacagttg 360
tgcaaagaaa tttggaaaaa caccatcatc agcacgtncg ccgtggctga cgacgcaa at 420
agcagctgag cttgagttgg agatcagtga agccagtctc tttgaagatg tattgccacc 480
aggaaaaaaa atttttgcag cttcttcctt aaagcanggg gggatccact agttctaana 540
nncgggncgt cnaccggggg tggganncnt ccnaantnnn cccctatagt nnagtcngta 600
ntacgccgcc gcttcacc 618
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<210> 534

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 534

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gaacagccta gattcaaaca g 21
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<210> 535

<211> 17

<212> DNA

<213> *Oreochromis niloticus*

<400> 535

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cgtagctgatg atgggtgt 17
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<210> 536

<211> 604

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 1, 3, 6, 14, 17, 22, 25, 30, 42, 530, 599

<223> n = A,T,C or G

<400> 536

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ntntnttttg atangtnatg cncnttgagn tccccgcggt gntcggccgc tctagaacta 60
gtggatcccc cccctgaag ctggctgtgc acaacagctg caggctgcat gcccccccg 120
tccacacaca cacacacaca cacacacaca ccctctcagt agctgaaagt gccaggaatg 180
tgttgactgc ttacaaacag aacccaaacc caggtttcac tgcatcctg cagcacagac 240
actgcagtgc tccttatgtg actgcatgca gggatagtta cgctgtagta gatttagtgt 300
gtaaatgttt atcaactgta gtcagaacta catctgatgg gtgcccacaa tcaagttcgg 360
actatagtta cattaacatt tggttattag catgaaaaag aagagacggt gatttttgtg 420
tgtttctgca acatctgatg ctcgatcatat ttgctggttag ttaataatta atgaaatatt 480
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gtaaggtgaa tgtggtggtg ctctatataa ctagcggttaa gaaaaccccn ccgttaagct 540
 tattgcgccc actaacgggg gctgcaggaa ttcgatatca aagcttatcg atcccgtna 600
 cttt 604

<210> 537
 <211> 16
 <212> DNA
 <213> Oreochromis niloticus

<400> 537
 ctggctgtgc acaaca 16

<210> 538
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 538
 tttgtaagca gtcaacacat t 21

<210> 539
 <211> 606
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 2, 3, 4, 7, 8, 9, 10, 14, 15, 19, 21, 29, 34, 41, 457, 461,
 464, 467, 526, 533, 563, 573, 595, 597, 599
 <223> n = A,T,C or G

<400> 539
 tnnnttnnnn ctanngaanc nctttggana ccnngccccc nctcgaggtc gacgggtatcg 60
 ataagcttga tatcgaattc ctgcagccca cagagcttcc atatgaaaca agtaggagct 120
 gttttacatga gaaacagtgt cgggttggtgc tccttagccg cctacccaca cacacacaca 180
 cacacacaca cacacacata gccacagcag aatagttggt ggctggggca ttgctgcact 240
 cacaaagagc gtctgcagac ttttattctt ttaatagacc aaatgtgtag cacaatgggg 300
 gggatccact agttctagag cggccgccac cgcggtggag ctccaattcg ccctatagtg 360
 agtcgtatta cgcgcgctca ctggccgctc ttttacaacg tcgtgactgg gaaaaccctg 420
 gcggttaccga acttaatcgc cttgcagaaa atccccnttt ngcnagntgg gcgtaatagc 480
 gaaaaggccc gaaccgatcg cccttccaac agttgcgcaa cctgantggc aantggaaat 540
 tgtaaagcgt aaattttttg gtnaaaaattc cnggttaaat ttttttggtg aaaaanancnc 600
 attttt 606

<210> 540
 <211> 18
 <212> DNA
 <213> Oreochromis niloticus

<400> 540
 tcgggttggtg ctccttag 18

<210> 541
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 541
 agccaacaac tattctgctg t 21

<210> 542
 <211> 291
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 5, 10, 65, 68, 270
 <223> n = A,T,C or G

<400> 542
 cacgnactcn gtcaactctg agcctgtcgc ttcccatcca tcccacatg caacgcccc 60
 tttgntntnc caagcacagt ccagcccaac tcactcctcc cttagtgtg ctgctgtgtg 120
 tgtgtgtgtg tgtgtgtgtg agtctgcctg tcacaccgag ttagcttttc agtaactcgg 180
 tgaacccgga ggtgaaacaa actgctgccg ggatgatcag gcacgcttta ccattggacc 240
 acctctccgc atgtaatcag gtctcacatn cttttttgtg aatgacaaat a 291

<210> 543
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 543
 aactctgagc ctgtcgtttc 20

<210> 544
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 544
 ggcagcagtt tgtttcacct 20

<210> 545
 <211> 638
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 3, 4, 5, 6, 7, 8, 10, 11, 13, 17, 19, 28, 30, 31, 53, 553,
 576, 617, 621, 626
 <223> n = A,T,C or G

<400> 545
 agnnnnnnntn nantttntnt tttgacangn nagcttatgg aacactcggg ggnttccgct 60
 ctagaactag tggatcccc atcgagaaaa cacggctcgg gcaaagccag agcagacaga 120
 agatttaata agaagtggta gcttttaggcg tgtataaatt gcagcgggaa gatctgacaa 180
 catgtatcat aatggaaatg tgaaatgtgg tggcttttcta taaacagaca tgcagatggc 240
 taagaacctc ttcaccagct cttttttttt tctttttttt tctataacga ggaaaaagga 300
 ggcgggtggga cgggggggtg ataatgcaca ctactcaca gcatcaataa taaaaccact 360
 gagtttaaca ttgctctccc acttaattaa ccacagtatg gactacgcac ttagtgtata 420
 tctgcaaadc aggcactatt acacacacac acacacacac acacacacac acacagaaca 480
 gtcaaccaac atatcactta ctggagcatt aaatttcata ttcccatggc aatagtgggc 540

tgcaaggaat tcnatatcaa gcttatcgat acccgncgac ctcaaggggg gccccggacc 600
cacttttgggt cctttantga ngggtnaatg ccccttgc 638

<210> 546
<211> 19
<212> DNA
<213> Oreochromis niloticus

<400> 546
gcagatggct aagaacctc 19

<210> 547
<211> 21
<212> DNA
<213> Oreochromis niloticus

<400> 547
tttaatgctc cagtgagtga t 21

<210> 548
<211> 660
<212> DNA
<213> Oreochromis niloticus

<220>
<221> misc_feature
<222> 6, 7, 17, 18, 28, 35, 41, 416, 523, 541, 546, 562, 567,
573, 580, 582, 584, 586, 595, 604, 610, 622, 624, 636, 643, 646, 649,
651, 653
<223> n = A,T,C or G

<400> 548
ttgaanncct ttgaaanncc cgcggtgntg ggcnntctag nactagtggg tccccccctc 60
atctctgtct ctctctctct ccctctgttt ccatctcata tactctccag ctttggcagg 120
cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca catatatata 180
tgactctccc acagggatcc aaactattac agtatagagc tctatgccat ctggctgagg 240
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caacagcaat attaagctga gctctccac tgtgcatgtg tgtccacacc cttttcagtg 360
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gggggcccgg taccagctt ttgttcctt tagtgagggg ttaattgcgc gcttggcgta 480
atcatgggtct tagctggttt ccttgggtgg aaaaatttgt tantcccgtt tcacaaattt 540
ncacanctaa ccattaccga anccctntaa gcntttaaan angntngtaa aagcncctgg 600
ggnggttgcn ctaaaaggaa tngnggacgc tttaanttca tantttnaant ngnggggggtc 660

<210> 549
<211> 18
<212> DNA
<213> Oreochromis niloticus

<400> 549
ccctctgttt ccatctca 18

<210> 550
<211> 21
<212> DNA
<213> Oreochromis niloticus

<400> 550
gatacctgtc catacctcct c 21

<210> 551
<211> 409
<212> DNA
<213> Oreochromis niloticus

<220>
<221> misc_feature
<222> 257
<223> n = A,T,C or G

<400> 551
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tccctcactc ttctattgca gggaataggg ctttgactc tgagaattcc agtaatgcgc 180
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<210> 552
<211> 20
<212> DNA
<213> Oreochromis niloticus

<400> 552
atcagattgg atgggaggtg 20

<210> 553
<211> 21
<212> DNA
<213> Oreochromis niloticus

<400> 553
aatatgaaat gcgcatgtgt g 21

<210> 554
<211> 526
<212> DNA
<213> Oreochromis niloticus

<220>
<221> misc_feature
<222> 9, 12, 13, 14, 21, 42, 74, 447
<223> n = A,T,C or G

<400> 554
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aagtctcttt cgtnccattg ggtgttcaaa taaagaaggg ctaattttat tcaaatacaag 120
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gagtcaggct taattgaaaa gcatctttta agaatgttaa gaagtgccct gttagccggg 300
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tttcttctg ctttgattgg gttttgtctt gtggtttttt gggggctgca ggaattcgat 420

atcaagctta tcgataccgt cgacctngag ggggggcccg gtaccagct ttttgttccc 480
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<210> 555
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 555
 ccattgggtg ttcaaataaa 20

<210> 556
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 556
 ggctaacagg gcacttctta 20

<210> 557
 <211> 227
 <212> DNA
 <213> Oreochromis niloticus

<400> 557
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 gtccatctgt tgcccgcagc tcagctcaga tcagcatgtg gacgtactga ctgctacgaa 120
 gccacacaca cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca 180
 cacacagtgt gagacagcca acagggttcg gcagaatcca acaggga 227

<210> 558
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 558
 ccgacagtca gctcagatca 20

<210> 559
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 559
 aaccctgttg gctgtctcac 20

<210> 560
 <211> 629
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 6, 24, 33, 40, 108, 419, 556, 616, 628
 <223> n = A,T,C or G

<400> 560

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cctggacttt ctcactgaag ggtgctgtgt ttactgcagt tagccgagtc ccttcagcat 180
gtcgtcacag gggagaagtg tttaataggg atgtttgtat tcctgcaactg ctgctgattt 240
gagattagag ctgaactgtt gagcggggga tatgcgacaca cacacacaca cacacacgca 300
ccatcctgag gggctttgtt gcaatattaa ggcgggtaag tatcagccgc atatagtatt 360
tagggggtct catccagccc cttgaccctg tgcctgtctg tgtgggctgc aggaattcna 420
tatcaagctt atcgataccg tcgacctcga gggggggccc ggtaccagc ttttgttccc 480
tttagtgagg gttaattgcg cgcttggcgt aatcatggtc ataagctgtt tcctgtgtga 540
aaattggtat cccgtnacaa ttcccacaac atacgagccg gaagcataaa gtgtaaagct 600
gggggtgcct aatganttga gctacttnc . 629

```

<210> 561

<211> 19

<212> DNA

<213> *Oreochromis niloticus*

<400> 561

caaagccgag aactggatt 19

<210> 562

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 562

tggatgagac cccctaaata c 21

<210> 563

<211> 600

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 2, 14, 30, 35, 600

<223> n = A,T,C or G

<400> 563

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gtgttttaact gttttatccg cgctcagagg caaccataca tcgcagattc cacagaacat 180
cattaaaaca cacttagata cacgcacacg agcactgcgc tcgtacgcac acacacacac 240
acacacactc actgtcacat cacgtctggt ggcttattca tgctgtcac atcgctcattt 300
actcaaccat gatggagtga tacaaatacc ggcagacata tttcaatatt ctgctggagc 360
aaattatgat gggctgcagg aattcgatat caagcttatc gataccgtcg acctcgaggg 420
ggggcccggg acccagcttt tgttcccttt agtgagggtt aattgcgcgc ttggcgtaat 480
catggtcata gctgtttctg tgtgaaattg ttatccgctc acaattccac acaacatacg 540
agccggaagc ataaagtgtg aagcctgggg tgcctaataa gtgagctaac tcacatttan 600

```

<210> 564

<211> 18

<212> DNA

<213> *Oreochromis niloticus*

<400> 564

cgagattcc acagaaca 18

<210> 565
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 565
 ccggtatttg tatcactcca t 21

<210> 566
 <211> 632
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 6, 12, 28, 36, 490, 504, 510, 548, 551, 569, 573, 576, 577,
 580, 599, 616, 621, 622, 623, 628, 629
 <223> n = A,T,C or G

<400> 566
 tgtgtnttgt cngaaccttg ggtaccgngc ccccentcga ggtcgacggt atcgataagc 60
 ttgatatcga attcctgcag cccccccgcc ccacgcccctc tgcccaaact gtcgacaccg 120
 ccgtaaacgg ggacgctcag ctgggttgtc tcccacgggtg acatgggtcac gtgggttcag 180
 ggcagtcaaa tgagactgct gtctgctagc gctcgttaca gtcaaaacca cctcatactt 240
 gaatcagtaa gtcacacaca ctcacactca cacacacaca cacacacaca cactctcaca 300
 cacacacaca cacacacaca cacacacaca cacacacaca cacgctcact gtgggtcgcc 360
 tgctcgcata gatctcttgc ggtttctggt ttgggtcttaa agtttagagga ggagaatatg 420
 ttgagaagtt ttactggaat gcgtctcctt cctgtatgga gcgtaaccat ctgtggggggg 480
 gatccacttn gtttctagag cggncgccan cggggtggga gctttcaatt tggccttata 540
 gtggagtngg natctacgcg ccgccttant tgnccnnttn gttttaaaaa cgtttggttna 600
 atttgggaaa aaaccttggg nnngttttnc cc 632

<210> 567
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 567
 cgctcggttac agtcaaaacc 20

<210> 568
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 568
 atacaggaag gagacgcatt c 21

<210> 569
 <211> 655
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature

<222> 3, 4, 5, 7, 8, 10, 11, 12, 14, 15, 18, 20, 23, 32, 33, 42,
43, 48, 58, 110, 532, 537, 542, 544, 550, 555, 559, 563, 568, 569, 583,
586, 589, 590, 595, 596, 597, 599, 630, 633, 639, 643, 649, 650, 651, 652, 653,
655

<223> n = A,T,C or G

<400> 569

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ggnnntnngn nnanntntn ttnttacatg gnngatctta tnnaaatncc ccggcccntt 60
ctggagggtcg acggtatcga taagcttgat atcgaattcc tgcagcccan ctctgttcct 120
cggatcaagct ctctggcact tctcaccttc aggtaaaaaa aaaaagaaaa aaaaaagtca 180
ggcatactct gtccatccat ctatctatcc atcaatccat ccatcattca tccagccatc 240
aatcctctgt caccatagt cgacttcagg ctcttggctg tgtttaatgg ttgtatttta 300
ttgccgggct gtgtctcctg ccttccccgt tggctgctcc actgtgtaac cgttcagcct 360
tggctgcgg gctctgttaa tctgctgctt aattagtgtt gatgaatggc tcagtgtgta 420
tggatgtgtg tgtgtgtgtg tgtgtgtgtg tctgtgtgca tgcgtacaag tgagcacgtg 480
tgtgtgtgtt ttggctttgt gtgtgtgtgt gtttgaatga attcgtgtgt gngtggngca 540
tnanccccc ggggngtnt ttntgttnt tgggtgggg ganccntnn ttttnnnang 600
gggccccacc cggggggggg ggactgcaan ttnccttnt aanggggggn nnntn 655

```

<210> 570

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 570

```

tcaatcctct gtcaccata g 21

```

<210> 571

<211> 18

<212> DNA

<213> *Oreochromis niloticus*

<400> 571

```

aaagccaaaa ccagcaca 18

```

<210> 572

<211> 654

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 2, 3, 4, 5, 6, 7, 10, 13, 19, 24, 28, 30, 31, 33, 36, 38,
40, 50, 72, 79, 82, 85, 146, 148, 151, 169, 175, 178, 559

<223> n = A,T,C or G

<400> 572

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gnnnnnnggn gangttgtnt tgnactngn ngngtntnan ggaactttcn caagtgcctt 60
tccgcttttag anctagtgn tncgncaaac ggaattctgc cacaaacaca ggtcaaacca 120
cagtgttcag catctatatg gggtangnga ntgtcatgtt ccgcagccng ttgangtnaa 180
gccaaaacat accgatcatt tcagctactg cctgactcga ctctcccatg tgggccaaat 240
ggctgaccaa ttaacagcag cttaactctt gagtccaaac agctatctct ctttctcaca 300
cacacacaca cacacacaca cacacacaca cacacacaca cacacacacc tgcataga 360
cataagcaga aaagcggatg cacacaagca tacaagta tggacatgct gatccacaag 420
cacttagacc cagtgggctg caggaattcg atatcaagct tatcgatacc gtcgacctcg 480
agggggggcc cggatcccag cttttgttcc ctttagtgag ggtaattgc gcgcttggcg 540
taatcatggt catagctgnt tcctgtgtga aattgttatc cgctacaatt ccacacaaca 600

```

tacgagccgg aagcataaag tgtaaagcct ggggtgccta atgagtgagc taat . 654

<210> 573

<211> 18

<212> DNA

<213> Oreochromis niloticus

<400> 573

gtggtccaaa tggctgac 18

<210> 574

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 574

cgcttttctg cttatgtgtt c 21

<210> 575

<211> 606

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 6, 13, 19

<223> n = A,T,C or G

<400> 575

ttgatnccct tгнаaccnc ggtggcggcc gctctagaac tagtggatcc cccatctaata 60
ctcacatggc aatattttat caatagtgtgta tcacctgata ttacatatta actgacagga 120
tcaagtgtcg acagtgccta agaactgctt tacagtgtcta ctaacagtat gtgagatggg 180
tgtaggtgag attttaatat tcaccaagcc aaattacttt cagaaaaaga ctctaaaaca 240
atccttcggg ctaaacaaaa gcctctcagt ttgtccttgt gcagaaaaag cgataaatcg 300
gtatataaaa gcagcacaga ataatgcatt tccaccatag ccacaagctg ctatacaatt 360
ctccagaaca ttacaagccc agcaggatgt tcacaatcaa aaaataccac acacacaaac 420
acacacacac acacacacac acacacacac acacacacaa acacactcag aagtgaatgg 480
aaaagccaac atcttagaaa taaacacaat acaaatgggg gctgcaggaa ttcgatatca 540
agcttatcga taccgtcgac ctcgaggggg ggcccgtac ccagcttttg ttccttttagt 600
gagggc 606

<210> 576

<211> 18

<212> DNA

<213> Oreochromis niloticus

<400> 576

caatccttcg ggctaaac 18

<210> 577

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 577

ttctaagatg ttggcttttc c 21

<210> 578
 <211> 570
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 516, 517, 542, 559, 563, 567, 570
 <223> n = A,T,C or G

<400> 578
 gaagcccgtt gctccccgcg gtggcggccg ctctagaact agtggatccc cccctcttca 60
 ggggcagagg acatcaagtg tgtttggtg tggtgtgtg tggtgtgtg tggtgtgtg 120
 cagagagaga gagatacaga cagaccacac catgtcatgt cgagaccacc ggtgcagaca 180
 ttagtgtgtg agggtcagtg aacaggtcag gaggtatttg ctcgacagtg ttggacttga 240
 tcacgatgtc ctgtaatgtg gaatttggtg gtgtagtcta cgtgtgcatg tgactctaga 300
 ggtcagaagc acatgttggt atttttccac tttgaacaag ttaaaaatta tactcatcct 360
 tctcttccaa actagaacgg acagacatca agcgcactta actctttaca gtaaataactt 420
 cggctcacat gtccgtcttg gatcattgcc cattttattca ttttgcactt taagatctca 480
 cccgatactt tatctaaatt aagacctttt tcttannttg ggccttgag gaaattccat 540
 tntaagcctt attcgaatnc cgncganctn 570

<210> 579
 <211> 17
 <212> DNA
 <213> Oreochromis niloticus

<400> 579
 ggggcagagg acatcaa 17

<210> 580
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 580
 caacactgtc gagcaaatac c 21

<210> 581
 <211> 833
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 2, 16, 17, 18, 19, 20, 23, 24, 25, 26, 27, 33, 41, 43, 572,
 577, 589, 614, 619, 633, 658, 669, 670, 675, 676, 678, 692, 704, 711,
 720, 731, 741, 758, 789, 791, 797, 816
 <223> n = A,T,C or G

<400> 581
 angtggtttt tttttnnnnn ttnnnnnttt ganggccttt nangcggccc ggccgctcta 60
 gaactagtgg atccccacac ataaacatta tccacacacc ttaaaaactaa ctaaacacac 120
 acacacacac acacacacac acacacacac acacacacac acacacacac acacacacag 180
 gctctgaaac catcagtcca acccagaagt ttttctttgt tgatttatat gttttatact 240
 ggaaaaaact atcagagaag tatgcatgtc cctagggaga cctccagaga caggctgttt 300
 ttcattgacac tttttccac ccatcggagc agtaacagac aaacaacctt ttcttgga 360

```

aaaggttgat actgttcctt gccaggttag tcaatttcaa ccctagtcag ctatgtgtgt 420
gtaaaggtgg atgcacaaca accaattaca gaggaagaa tttagtctct gtgctcaaag 480
ttatttgggc tgcaggaatt cgatatcaag cttatcgata ccgtcgacct cgaggggggg 540
cccgttacct agtttttggt ccttttagtg angggtnaat gcgcccttng cgtaatcatg 600
ggcatagctg gttncctgng ggaaaatggg atncggttac aattccacaa catttcgngc 660
ccggaagcnn aaagnngnaa acctgggggt gntaaatgag ggancctacc nacataaatn 720
gggttgggct nactggggccg nttttcagtg ggaacctntc gtgccacttg attaatgaat 780
cggccaacnc ncggganagg gcgtttgccc tatggnggct tttcgcttct gct 833

```

<210> 582

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 582

acaataaaca ttatccacac a 21

<210> 583

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 583

gactaggggt gaaattgact 20

<210> 584

<211> 377

<212> DNA

<213> *Oreochromis niloticus*

<400> 584

```

acattcagga ctataatatg tgtttttagg attcaccccc cttctctctc acgtgtcctc 60
tttgcaggaa aagtctgttt atttccttct tggctgtagg aagtgtgtgt cctccctgca 120
agtggatcag cttccctgtg ggtggagggt actcgtgttc tcaactgctgt ggcaggcaaa 180
ggtgccaaat gcacacacac acacacacac acacacacac acacacacac acacacacac 240
acacacacac acacacacac acacacagga tcaagacctg gacagtgtgg agggctaagc 300
tctgctgctt ctatgcagcc ttcagggtta cattacaggt tgtcccaaac ttaaccctgt 360
gcctgttagc taactat 377

```

<210> 585

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 585

ttatttcctt cttggctgta g 21

<210> 586

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 586

taagtttggg acaacctgta 20

<210> 587

<211> 596

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 2, 4, 5, 7, 9, 10, 12, 18, 20, 23, 24, 44, 55, 59, 78, 82,
513, 542, 548, 565, 569

<223> n = A,T,C or G

<400> 587

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gngnnngnann tnatttgntn gannaaggaa catggaggaa cccncgcttc tttangagna 60
ccaccgtatc gataagcngg anacgaatt cctgcagccc cttggcaaag cttccagtgg 120
ggaggggggg gatacagact cgatgaggca tttttttccc caggtaagaa aaatagaagg 180
ctgactctaa acagactgtg agcagatggg ggattactgt gtcaagaatt ataactggta 240
aatattacaa atgagataca acacacacac acacacacac acacacacac atacacacac 300
acacacacac acacacacac acacacacac acacacacaa ataggctact gagaaagatg 360
ctagctattg atcagctggg atttgagtct tcctttatga ttactgtgac agcagtgtct 420
atcattgtgc aataacacca gtctgtgtct cccacagtaa tcaactctgga gccaaagtgt 480
atgtctacta gctgaatgga aaattgcaga gngngaatat tcacccccac acactttgaa 540
ancaaaanct ttgcctgggg ggccncaana actcacaact aaaggcccat ttgcat 596

```

<210> 588

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 588

```

gtgagcagat ggtggattac t 21

```

<210> 589

<211> 19

<212> DNA

<213> *Oreochromis niloticus*

<400> 589

```

ggaagcacag actggtgtt 19

```

<210> 590

<211> 363

<212> DNA

<213> *Oreochromis niloticus*

<400> 590

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tcaggatatg acttatgcac cttctttgtc acacctttct gcaactctgt tagttggcta 60
acctcccttc gtgctacttt gatcttgccc tctagcctcc ttctccatgg agggactgc 120
cccttggtgg tggtcaactt gtagccaagc agctcactga tcaactgtgc cgtagttag 180
atcagcttgt tagtgctcgt aatcgtggtt gtaggtatct gcttttgtct tgcaactgtcc 240
acttttttgc aatgacaatg cagattttcc actttttgga caaatacatg cagatttact 300
gtatgtgtgt gtgtgtgtgt gtgtgtgtgc aacattggca tttgtttact cagatccaag 360
gca 363

```

<210> 591

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 591

gctgccgtag thtagatcag 20

<210> 592
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 592
 tgccttggat ctgagtaaac a 21

<210> 593
 <211> 792
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 493, 549, 614, 622, 627, 631, 632, 643, 683, 686, 706, 712,
 719, 734, 737, 740, 757, 758, 759, 763, 785, 788
 <223> n = A,T,C or G

<400> 593
 tttaacctccc ttgaaagcc cccctctgag gtcgacggta tgcataagct tgatatcgaa 60
 ttctctgcagc ccctcgcagc tgcctttata agcgatattg caatgggaca tttgcttctc 120
 gcacgaacat tatccaacga tttccccctg aaggcttggc atgttcaatt tgagacgcag 180
 cctaaaatac caggcagcgc atctcacacc ctggcatgtg gtggtgtcac tcctgttcat 240
 cactcagttc ccgtagact cccactggag cgagatgggt ttgatgctgt gtgtgtgagt 300
 gtgtgtgtgc aagccagttc tttcttaatg cttgtttgat ggtgcatttg tgcactttgt 360
 tgtgtatctc tatttacttt tgtaggcgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgga 420
 atgctgtctg ttagtaaac agacgcagcg caagtcgggg gggatccact agttctagag 480
 cggccgcccac cgnggtggag ctccaattcg ccctatagt agtcgtatta cgcgcgctca 540
 ctggcccgnc gtttaacaac gtcgtgactg ggaaaaccct ggcgttacct aacttaatcg 600
 ccttgacgca catncccttt cncagntgg nntaatagcg aanaaggccc gcaccgaacg 660
 ccctttccca acagggttgcg canccnaatg gcgaatggga aattgnaagc cntaaatant 720
 tttgttaaaa ttcnccntan aatttttggg aaaatcnmnt tantttttta acccaatag 780
 ccganatngg cc 792

<210> 594
 <211> 17
 <212> DNA
 <213> Oreochromis niloticus

<400> 594
 ggagcgagat gggtttg 17

<210> 595
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 595
 gctgcgtctg tttactacac a 21

<210> 596
 <211> 806
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 3, 4, 5, 12, 13, 14, 17, 30, 39, 463, 515, 532, 548, 616,
 642, 649, 650, 658, 663, 665, 680, 694, 712, 725, 730, 733, 748, 749,
 752, 757, 761, 768, 771, 774, 775, 782, 785, 788, 804, 806
 <223> n = A,T,C or G

<400> 596
 tgnnnntttga annnctntga atggcccttn cgcggtgnc ggccgctcta gaactagtgg 60
 atccccacaca tgtagttagt ttccttttac actgctccgt gtgtgtgtgt gtgtgtgtgt 120
 gtgtgtgctgt gtgcagtgat gtgtagtgt tttgtcctgt ccatgggcct actgtgaaac 180
 agactcttta acttttcaag cagtgaatgt ttttttgact caagggtgtg tgactttcac 240
 ctgatgtatg ctgttagatt tcccactctt cagtaaccgc tggacttgaa gcattatcaa 300
 tgataaggaa taattcaagt tattccaggt gtccccaacc tcaaagggtc actatagtta 360
 atcaacagta tagaaaaaaa acacatcagt gggctgcagg aattcgatat caagcttacc 420
 gataccgtcg acctcgaggg ggggcccggg acccagcttt tgntcccttt agtgagggtt 480
 aattgcgcgc ttggcgtaac catggtcata gctgnttcct gtgtgaaaat gntatccgct 540
 cacaattnca cacacatacg aaccggaagc ataaagtgtg aaacctgggg tgcctaaaga 600
 gggagctaac tcacantaaa tgccgttgcg ctactggcc cnttttcann cgggaaanct 660
 gtngngccac tgcattaatn aatcggccaa cgcncggga aaagccgttg cntatttggg 720
 cgctnttccn ttnccttggt atgactcnnt tngcttnggc ngttcggntt nggnnaaccg 780
 gnatnagntt actcaaaggg gggnan 806

<210> 597
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 597
 agtttccttt tacactgctc c 21

<210> 598
 <211> 18
 <212> DNA
 <213> Oreochromis niloticus

<400> 598
 tccacggggtt actgaaga 18

<210> 599
 <211> 611
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 8, 11, 14, 489, 519, 561, 562, 611
 <223> n = A,T,C or G

<400> 599
 tgtgtctncc ncengatttt ttgcatcccg ccccttttcg aggtcgacgg tatcgataag 60
 cttgatatacg aattcctgca gccccacgc ccctgatatg gaaccttta gccttgacag 120
 agtttacaca ggtgagttat gaaaatatgc accacactgg tgcattctgg gaatattgtg 180
 gtttttcagt tatcagcagt ggggtggcggc tttggcttag tgccatctcc ataaacacac 240
 aaaagcatcg gcgtgcctct catggatact gctggcggtg ccatggaaac atgtgaggag 300
 aaactgcaga atataggatc aactgtagct cccccacca ccaccacaca cacacacaca 360

cacacacaca cacacacaca cacacactat gaatgattat gcaaatgaag cgacggagac 420
 ctgctgtagc gttcagacgc tccgaggctc ctttatgtct ccacctgctc cagccttcac 480
 acagcactnc gactgaccga gcagaccaat cagcacctnc acatactctc acatgacctt 540
 tcatcgcttt agctgaagcc nncagtgac aggcactaat ctacctttgc ctctaaaaca 600
 cacgagggt n 611

<210> 600

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 600

tagtgccatc tccataaaca c 21

<210> 601

<211> 17

<212> DNA

<213> *Oreochromis niloticus*

<400> 601

gtctccgtcg cttcatt 17

<210> 602

<211> 288

<212> DNA

<213> *Oreochromis niloticus*

<400> 602

cagctacact attagagagt gaacatttga ctgaaacatg actgcaggag acatgatata 60
 atcaatgaat cagtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt 120
 gtgtgacatt attacagaat aatttaactg aaatatgtct ggaggagagc tcgaacagaa 180
 caacatttaaa ctgaatcact gccgaagtgt tttctctcct ctgctgaaag tttaatgtcg 240
 ggtttgcct tgctgacttt tgtcagcagc ttcttagata acatccgg 288

<210> 603

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 603

ctgaaacatg actgcaggag 20

<210> 604

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 604

cccgcatta aactttcagc a 21

<210> 605

<211> 540

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 3, 6, 21, 22, 23, 25, 33, 38, 43, 56, 59, 70, 71, 85, 111,
114, 495, 504, 539

<223> n = A,T,C or G

<400> 605

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atnttttttac tattttatctt nnnantttctc ttnccttantg ggnaaaaggct tctganctng 60
tggatccccc ncaacaaaaca gacanttttga cagatgcaca cacgcacagt nggncagact 120
ccgatatttca tcacgttttaa ctcatacaaaa tttaatgcat gcatgaacac acatgtaaant 180
gcacacatgt atgaacatct ggacatgtaa gaaagcctag gtgtgcataa cacacacgca 240
cacacacaca cacacacaca cacacacaca aacatgcaca cacatgcacg tatgccgggtc 300
catttacact gtggcgacag tgagtctgtt agcgggatgc catagtgggc tgcaggaatt 360
cgatatcaag cttatcgata ccgtcgacct cgagggggggg cccgggtaccc agcttttgtt 420
cccttttagtg aggggttaatt gcgcgcttgg cgtaatcatg gtcataagctg tttcctgtgt 480
gaaattgtta tccgntcaca attncacaca acatacgagc cggaacataa agtgtaaant 540
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<210> 606

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 606

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ccgatatttca tcacgttttaa c 21
```

<210> 607

<211> 18

<212> DNA

<213> *Oreochromis niloticus*

<400> 607

```
atccccgctaa cagactca 18
```

<210> 608

<211> 598

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 1, 10, 12, 23, 83, 431, 571

<223> n = A,T,C or G

<400> 608

```
ntttgacaan cnttgggtac cgngcccccc ctcgaggctcg acggtatcga taagcttgat 60
atcgaattcc tgcagccccc atnttcacag ttaaccagcg cctgctgaca aacgacagta 120
gcggttttgc agctgggaga tgaatcagac cgtcataact taacatgtgg tcgcctgcaa 180
acggtgacat cttcgcaact tcgatgccaa atgagcctgt tgtctgcacg ccaatgcaaa 240
agccactcac tcacacacac acacacacac acacacacac acgaataaag agacggatcc 300
gctgggttagg catgccatgc agattcgcac ctgcacacgc cagatagcca aatccaacgc 360
aagttgcaaa aacaagcccc gcatttcgga aaatcatgcc ataacgttta ctcataatca 420
caccgggctt ncagctagca accttaacta gcagcatatc tgctagcatc gccagaagg 480
gggggatcca ctagttctag agcggccgcc accgcggtgg agctccaatt cgcctatagg 540
gagtcgtatt acgcgcgctc actgggccgt nttttacaac gtcgtgactg ggaaaacc 598
```

<210> 609

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 609

aacggtgaca tcttcgcaac t 21

<210> 610

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 610

gatttggcta tctggcgtgt g 21

<210> 611

<211> 560

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 6, 482, 483, 546

<223> n = A,T,C or G

<400> 611

```
atcttnacag ttaaccagcg cctgctgaca aacgacagta gcggttttgc agctgggaga 60
tgaatcagac cgtcataact taacatgtgg tcgcctgcaa acggtgacat cttcgcaact 120
tcgatgccaa atgagcctgt tgtctgcacg ccaatgcaaa agccactcac tcacacacac 180
acacacacac acacacacac acgaataaaag agacggatcc gctggttagg catgccatgc 240
agattcgcac ctgcacacgc cagatagcca aatccaacgc aagttgcaaa aacaagcccc 300
gcatttcgga aaatcatgcc ataacgttta ctcataatca caccgggctt ccagctagca 360
accttaacta gcagcatatc tgctagcatc gccaagaagg ggggggatcc actagtctta 420
gagcgggccg accgcggtgg gagctccaat tcgcctatag tgggttcgta ttacgcgcgc 480
tnntggcccg gcggtttaca acggtcgtga ctgggaaaac cttgggcgtt acccaactta 540
aatcgncttg cagcacatct
```

560

<210> 612

<211> 18

<212> DNA

<213> Oreochromis niloticus

<400> 612

atgccaaatg agcctgtt 18

<210> 613

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 613

cccgggtgtga ttatgagtaa a 21

<210> 614

<211> 347

<212> DNA

<213> Oreochromis niloticus

<400> 614

```

ctgcacacac agcatgtctt aaaaactaat gctgagctcc atcagggctg gatgccatga 60
gtcttaatta agacagccat gccaaagtaa gaagtgaata attctactcc ccaccaacca 120
ccaccatctc cctattacac acacacacac acacacacac acagaagcct aaactctcat 180
ttgcagatgg atgagcgtgt agatgcagac aaaccacaaa gagagactca gattatcagt 240
ttaaattgggt cagaaaaaagc ttgctcagtg agtagtgtgt ggatgcctgt gtgggcgctg 300
agatagaaaa accatttagt cacacctaca tgagatacct gttgtgt 347

```

<210> 615

<211> 17

<212> DNA

<213> *Oreochromis niloticus*

<400> 615

agacagccat gccaaagt 17

<210> 616

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 616

tttctgaccc attaaaaactg a 21

<210> 617

<211> 602

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 3, 6, 9, 20, 27, 35, 77, 549, 551, 578, 588, 592, 595

<223> n = A,T,C or G

<400> 617

```

ttnganctnt tggaccttcn gaccccntct ggagntcgac ggtatcgata agcttgatat 60
cgaattcctg cagcccntca gatttacagt ctatacttca tattctgatg gagtgggaaa 120
gaaaagcagg acaggcgag gacacacaca cacgcacaca cacgcacgca cacacacaca 180
cacacacaca ccttatggaa gctattagtt ctgataacta ttattacttc ctaatcatcc 240
tagtgtcatg ttgaacactt cacaggagtg agaagcttgc aaatctaagc aggaggtgt 300
caaaagcaaaa aaaaaaagaa gaagaagaaa aaaaggaaga aaaaaatgct gtaatgttgc 360
aataatgtgc aggtagctga ggagaaaatg actgcccaga tacagactgc agctaagtga 420
ttcagaagaa gaggctagcg agctttgact gaagcagatg gcctctgtta taaaaaagtg 480
cattaaacac aaagatcttc ttactttacc cacagaaaga taaagttgat gccgttttat 540
gaaccctgng nggatataaa gagcccacta ttgggaanta tggacagngc tnctntccat 600
gg 602

```

<210> 618

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 618

tcatattctg atggagtggg 20

<210> 619

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 619

gtatctgggc agtcattttc t

21

<210> 620

<211> 814

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 3, 33, 53, 478, 493, 600, 610, 614, 640, 658, 660, 666,

687, 689, 713, 714, 720, 740, 744, 758, 766, 767, 770, 772, 778, 795, 813

<223> n = A,T,C or G

<400> 620

ttnacttttta attccctttt gaacgcggcc gcngccgttc tagaactagt ggntccccca 60
 caaaatctct ccagcctgta agaacaaaac aatgcagtct tatcagggat ctcttatttg 120
 ttacacaaac aaatcagagc cgactgggtg aaagtccctg cgcttttggt tatctcggct 180
 aactgagggc agaagaacag gacgggtccag ttgattactt gaggtgtttt gtgtgtgtgt 240
 gtgtgtgtgt gtgtgtgtgt gtgtgtgctg gtatgtgtgt gctgaactct ttacatttct 300
 tttctttttc aggaagactt gcagcagttg atactcatgc ctctcccaaa tgttgccatt 360
 ctgggacctg tgtaaaagca gcaggattta cgctggaatt ttagttctgc tgagccaaat 420
 aagacaggtc aggggtgaaga aggcacagcc aaataaaaag ctaccacaaa acggaaaangt 480
 tatgacaaat canactatga ggcaaaaaag aaagctcagc ttttttggtt tcatggacaa 540
 aagaatttat gtggctggaa tatgacgagc taaataacat aatgttctgc cgggtgtgtn 600
 gtgagtttcn ttnattttga gtcgacaagc gccttttgtn actgggacca gttatttngn 660
 agaaanaccc cattagaacc catgagnana tcaagaaagc attatttgcc canntctgcn 720
 atatcttttc ccagaacaan acangcattt gcaaaaanat taaccnngcn gnaaccnnaa 780
 gtccctgaaa aaatntttta aaagcggggg ctnc 814

<210> 621

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 621

gtttatctcg gctaactgag g

21

<210> 622

<211> 17

<212> DNA

<213> Oreochromis niloticus

<400> 622

gtcccagaat ggcaaca

17

<210> 623

<211> 610

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 2, 3, 4, 7, 8, 9, 10, 11, 12, 13, 14, 17, 19, 23, 25, 36,

44, 53, 60, 61, 65, 75, 136, 137

<223> n = A,T,C or G

<400> 623

```

gnnnngnnnn nnnnttnant ttntntaagt gatagnagat cttnagggaa acnccgttcn 60
nttngaggc cgacngtatc gataagcttg atatcgaatt cctgcagccc acattcttag 120
ttcaagcagt attatnnaag ccattccttt gatcctgagc acctctaacc actttgtgtt 180
gggggaggct ttattgtaga tacatcctat ctagaagatc tgtttcttgt gttgtaagct 240
tcctgctttt atgacccttt tggtcagcag gaggtcacac aaacgcacac acacacacac 300
acacacacac acacacacac acacacacat tcttacttac atacagaagt tcacacatac 360
acatacaaag ccttgtctta gaaccatgtg ggcgttgctt tgctgtgtga actgtctctc 420
aataaaaaggc agcaggagga gggggggatc cactagttct agagcgcccg ccaccgcggt 480
ggagctccaa ttcgccctat agtgagtcgt attacgcgcg ctactggcc gtcgttttac 540
aacgtcgtga ctgggaaaac cctggcggtta cccaacttaa tcgccttgca gcacatcccc 600
ctttcggcag                                     610

```

<210> 624

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 624

ttgggggagg ctttattgta 20

<210> 625

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 625

gcccacatgg ttctaagaca 20

<210> 626

<211> 629

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 1, 2, 3, 4, 5, 6, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18,
19, 20, 24, 25, 28, 30, 32, 37, 40, 50, 52, 57, 62, 545, 615

<223> n = A,T,C or G

<400> 626

```

nnnnnnngnnn nnnnnnnnnn ttannttn tnnttgnagn ggatcttaan gngaacnctc 60
cncccttttcg aggtcgacgg tatcgataag cttgatatcg aattcctgca gccccctgaa 120
aatcttcctt gatgaactgc actaagaata gggtccttta tgagtctcat taccaaacc 180
aaactgtttc aggcagagct gtgcgagaca ccccgacaag tcctggtaat tatctttagt 240
gagcggagcg cgacacactg ctgtcgcttc atgaacacat agcacagagc taaccgctca 300
gagagattac aggtcatgt gcatcaaaga cgagcacgca ctcacacaca cacacacaca 360
cacacacaca cacacacaca cacacacacc gtttaatata catgtccact ttgctgatgt 420
aaaccaatth ttttcttttt ttgggggatc cactagttct agagcgcccg ccaccgcggt 480
ggagctccaa ttcgccctat agtgagtcgt attacgcgcg ctactggcc ggtcgtttta 540
caacngtcgt gactgggaaa accctgggagc ttacccaact taatcgctt gcagcacatc 600
cccctttcgc agctnggcgt aatagcgaa                                     629

```

<210> 627

<211> 17

<212> DNA
 <213> Oreochromis niloticus

<400> 627
 tcgggtcaag ccaaaac 17

<210> 628
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 628
 actgctcccc actgtaatca t 21

<210> 629
 <211> 612
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 2, 4, 7, 8, 9, 11, 12, 18, 19, 20, 27, 34, 53, 118, 123,
 487, 521, 528, 545, 571, 576, 580, 588, 589, 597, 601, 602, 607, 612
 <223> n = A,T,C or G

<400> 629
 tntntnnnc nnctagannn ttttggncctt cccnccccct ttcgaggctcg acngtatcga 60
 taagcttgat atcgaattcc tgcagcccct tttgtttcgc ggtgtctgaa gtgaatgnga 120
 cantgaataa acagccctca accctgagct cctcgctcaa cttagggaac gagcgtgcgc 180
 tttgaaacaa atgcagagag gctgacacgc accaatatat aaatggacac acacacacac 240
 tgagggaggc atttagctcg atgcactacc agcaagtagt gacacatgtg gctcagaggg 300
 agtaagctgc tggaggagtt ggcaagcagc tggaagtctt gctggcatgc ctcactgcta 360
 aactatgcac aagtagaaac gcacacacac acgcacgcac acacacacac acacacacac 420
 acacacacac acacacacac acacaggttc gaccatgttt cttctcttca ccttagcacc 480
 cacctcntca gtgggggatc cactagttct agagcggccg ncaccgcngt ggagctccaa 540
 tttcnccta tagtgagggt cgtattacgc nccgcntcan ttggccgnnt gttttanaac 600
 nnttgngga.cn 612

<210> 630
 <211> 17
 <212> DNA
 <213> Oreochromis niloticus

<400> 630
 gagtggtg ctgaggt 17

<210> 631
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 631
 gagtaagctg ctggaggagt t 21

<210> 632
 <211> 304
 <212> DNA

<213> Oreochromis niloticus

<400> 632

```
atgcttccca aaggcttctt gaagcttaaa tgattgtagc acatggaatt acaatcacat 60
taagattatc ttagccttga aggaatagtt tgacattttg gcagattttg cttattggat 120
tttcttgcta aaagttaaaag ccctttttaca gagagagtat ttcacaatat ttaaacaggc 180
gggtgacgaa ttaaagtttt atgtgtgtgt gtgtgtgtgt gtgtgtgtgc gtgtgtgtgt 240
gtgtgtgtgt gcagtcttat aaagcctttg ccaaatacaa catgcagatc atcaaaaatg 300
agat 304
```

<210> 633

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 633

```
ttggcagatt ttgcttattg g 21
```

<210> 634

<211> 20

<212> DNA

<213> Oreochromis niloticus

<400> 634

```
catgtttgat ttggcaaagg 20
```

<210> 635

<211> 699

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

```
<222> 2, 3, 5, 6, 7, 13, 19, 23, 25, 33, 43, 44, 61, 538, 543,
554, 561, 584, 592, 597, 605, 607, 610, 615, 618, 629, 630, 636, 642,
643, 649, 651, 655, 656, 662, 663, 681, 686, 690, 695, 696
```

<223> n = A,T,C or G

<400> 635

```
gnntnnnact tcntcttttna ctnangatct ttntgaaagc ccnnccgctt tggcggccgc 60
nctagaacta gtggatcccc cacagagcgc agaggaaggc tgtgtgaggc gtgtaatgct 120
aaattattttg atcactgaaa ctagaaatgt atggtatgtt tgaacatgct tatacacaca 180
aagcgtgcac atacacacac acacacacac acacacacac acacacacac acacacacac 240
acacacacgg taaaccataa acttccacat tacagattca tttgctcatt tgagcaaadc 300
tgcgtttggt ccaccaccg ctcttgaagg gtcagtctta tgaaacaatt gcgtatttaa 360
tgaggctctg catacaagca actctgtgca cgagctcaaa cacacacata cacattccca 420
tacacactca ttatgtacgc agtgctccca ctgagtgggc tgcaggaatt cgatatcaag 480
cttatcgata ccgtcgacct cgaggggggg cccggtaccc agcttttgcc ccctttangg 540
ganggggtta aatntgcccc ncttggggcg taaattcatg gggnaataag cntggtnttc 600
cctgngntgn aaaanctngg ttttccccnn ttcacnattt tnnccccna nctttnngga 660
annccggaaa acctttttaa nttttnaaan ccccnngct 699
```

<210> 636

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 636
tgtgaggcgt gtaatgctaa a 21

<210> 637
<211> 17
<212> DNA
<213> Oreochromis niloticus

<400> 637
aagagcgggtg ggtggac 17

<210> 638
<211> 620
<212> DNA
<213> Oreochromis niloticus

<220>
<221> misc_feature
<222> 14, 19, 27, 412, 524, 539, 547, 569, 592
<223> n = A,T,C or G

<400> 638
ttgattcctt ggantaccnc ggtggcngcc gctctagaac tagtggatcc cccacaatta 60
catgtaaata ctttattctg tcctctccac accctccatc aggataaaga gaagggtgagt 120
ctcccatagt gcatttcagg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg 180
tgtttaacgg tcagcgtgtg caggtggagg tcgaggagtc gagcggcgac gggcagatcc 240
acagtctgga ccctcagctg gagcggcagg tggagatagt caggaacctg gtggactcgt 300
accttgccat tatccaccgt accatcaggg acctgatccc caagaccatc atgcacctga 360
tgggtcaacaa tgtacgacac acacacatac acaagggggc tgcaggaatt cnatatcaag 420
cttatcgata ccgtcgacct cgaggggggg cccggtacct agcttttgtt cccttttagtg 480
aggggtaatt gcgcgcttgg cgtaatcatg gtcatagctg tttnctgtgt gaaattgtna 540
tccgctnaca attccacaca acatacganc cggaagcata aagtgtaaag cntgagggtgc 600
cctaattgagt gagctaactc 620

<210> 639
<211> 21
<212> DNA
<213> Oreochromis niloticus

<400> 639
cctccatcag gataaaagaga a 21

<210> 640
<211> 17
<212> DNA
<213> Oreochromis niloticus

<400> 640
actcctcgac ctccacc 17

<210> 641
<211> 324
<212> DNA
<213> Oreochromis niloticus

<220>
<221> misc_feature

<222> 8, 167, 246, 269

<223> n = A,T,C or G

<400> 641

```
gacgtctnca ctctacatgg aaaaacacac acttactcta ctcatcacgc tctgttatct 60
gtcagcaatt actcactgcc tcctaccac caaacccctc gagaagcatt actttgaaat 120
gcccagaaac acacacacac acacacacac acacacacac acacagnttt acacattcac 180
actttcacat ttccacacct gtggagaaaa ccagtttctc tggcatttta tcagcttatt 240
tgctgntgct atggaaacaa gccttgcana gagagatggg atttgtgtgt gtgtgtgtgt 300
gtgtgtgtgt gtgtgtgtgt gccc 324
```

<210> 642

<211> 19

<212> DNA

<213> *Oreochromis niloticus*

<400> 642

```
actgcctcct acccaccaa 19
```

<210> 643

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 643

```
gcaaggcttg tttccatagc 20
```

<210> 644

<211> 598

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 3, 4, 6, 12, 15, 18, 75, 495, 593

<223> n = A,T,C or G

<400> 644

```
ttnnanacct tngancnng ccccttctcg aggtcgacgg tatcgataag cttgatatcg 60
aattcctgca gcccntaggg gaggcgggtg tcagctgaga ccatcagtca tgcattggacg 120
ctgctgtgtg gctctgtgga tgtgataaaa accaaagcag agcactgcaa acaactgctg 180
ctgtgcacgc acacacacac acacacacac acacacacac acacacacac acacacacac 240
acacacacac acacacggat acacataaac agtcaattat cagtgaata gcacaacact 300
ctctttcttc tgtatactgt ttccctttca gtctcttcca catcacgtcg tgttccccgac 360
tctctccccg tcaactctctg ttccctctcc ctctcccttt ctctctgcaa tctctcatca 420
tcgcttttagc acattaattg actcattatt ccaattcgtg gggggatcca ctagttctag 480
agcgcccgcc accgnggtgg agctccaatt cgccctatag tgaagtcgta ttacgcgcgc 540
tcaactgggccc cggtcgtttt acaacgggtcg tggactggga aaacccttgg cgntacct 598
```

<210> 645

<211> 19

<212> DNA

<213> *Oreochromis niloticus*

<400> 645

```
gctgctgtgt ggctctgtg 19
```

<210> 646
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 646
 aacacgacgt gatgtggaag a 21

<210> 647
 <211> 576
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 462, 504, 507, 510, 575
 <223> n = A,T,C or G

<400> 647
 acatcagcgg ctgagtgaac atcgggctcgt ccatctcgtt atgacccatc cgacggtaac 60
 acacctgcgc acacacacac acacacacac acacacacac acacacacac agtaaggact 120
 gtttccaggt gtgtgaacag gtaggagcag actccagatg atggatgtgt gtcagagagg 180
 agagacgcag ggaaacagtc gcctctgagg tctgctgtga cttcacacag tgaaataaaa 240
 tatataatgt cataaataat aacgtgtctg ctcatagctt tacctgctga gcatagcaac 300
 atgtagggag gagcaaatgt gctaaaaaaaa aaattaaata accaacaaaag agccaagaca 360
 ggaagaggga ggaaacatga tgacatcatt gaaaacaaaa atgaaaaaag gaaacaaaaa 420
 ttaatttaac atcagaaaca aacgttctat aaacgtgtgt gngtttttac tggaccaggt 480
 tgaccaccca acgtcttttg tggnaanggn ggctttttcca ctcggggggc ttgcaaggaa 540
 attccgaatt tcaaagcttt atcggataac ccgtng 576

<210> 648
 <211> 16
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 648
 ggctcgtcca tctcgt 16

<210> 649
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 649
 cttggctctt tggttggttat t 21

<210> 650
 <211> 622
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 8, 25, 28, 31, 82, 455, 471, 512, 555, 562, 569, 596, 608,
 615, 619, 620
 <223> n = A,T,C or G

<400> 650

```

ttgatttnat tcccttgga acccngtncc ntttggaggt cgaccgtatc gataagcttg 60
atatcgaatt cctgcagccc cnttatatgc attcatccca tcacctggaa cacacacaga 120
aagctgagtc aactaaaaat aattactcta attactccat ttcactacta gtattttacac 180
aaaccagtga aacacacaca cacacacaca cacacacaca cacacacaca cacacacaca 240
cattgtgtca ctcttaaaga agtaataata caccaagaaa aataacctgac tgatgtaaca 300
ggaatacact ctgatcagat gccagactcg ttaaactgggt ttcattgtgtt tccttgcggt 360
gacagacgag cattagcaat ttacaattta ctgttccttg tttgaccttt atattttattt 420
gggggatcca ctagttctag agcggccgcc accgnggtgg agcttcaatt ngccctatag 480
tgagtcgtat tacgcgcgct cactggcccc tngttttaca acgtcgtgac tgggaaaacc 540
ctggcggttac ccaantttaa tngccttgna gcacattccc ctttcgccac tggggntaat 600
tagcgaanag gccncccn tc 622

```

<210> 651

<211> 18

<212> DNA

<213> *Oreochromis niloticus*

<400> 651

```

tgcattcatc ccatcacc 18

```

<210> 652

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 652

```

tttaacgagt ctggcatctg a 21

```

<210> 653

<211> 828

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

```

<222> 3, 4, 19, 26, 32, 45, 61, 505, 516, 528, 556, 578, 580,
      584, 592, 596, 608, 630, 636, 640, 646, 660, 669, 676, 682, 685, 686,
696, 709, 714, 717, 718, 720, 765, 767, 780, 781, 784, 786, 793, 804, 812, 813,
815, 816, 824

```

<223> n = A,T,C or G

<400> 653

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ttnnaatccc tttgcaatng cccttnccggt cnacgggtatc gatcngcttg atatcgaatt 60
nctgcagccc actaggaaat catttggtgcc ctttgtattg tttatttatg cactctagtt 120
ggcgtaggca aacagaaatg gtccgcaata tatgctccca caaataggca caggcacgcg 180
cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca cagggggggt 240
tatggaagca agtggtgaca cgctgtggac aggtttcgag aggttttagcg acatgtgtgt 300
tctaaagtta gcgcagttgg agaatgcctt ccattcttgc gtccatccat ccctgagcgt 360
accctcctct ccagctgtct ccattctatc ccctgacctg agctgctgtc agggggggga 420
tccactagtt ctagagcggc cgccaccgcg gtggagctcc aattcgccct atagtgaagtc 480
gtattacgcg cgctcactgg ccgtngtttt acaacntcgt gactgggnaa aaccctggcg 540
ttacccaact taatncctt gcagcacatc cccctttngn cagnttggcg tnatancgaa 600
gaggccnngc accgatcgcc cttccaaaan gttgcnaaan ctgaanggcg aaatgggaan 660
ttgttagcng ttaaanattt tngtnnaaaa ttcccngtta aaatttttng ttanaannan 720
cctcaatttt ttttaaccaa tttgggctaa aaatccggca aaaantncct tttttaaatn 780
naanangaat ttntaccag aatnggggggt tnnannggtt ttcntccg 828

```

<210> 654
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 654
 tgccctttgt attgtttatt t 21

<210> 655
 <211> 17
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 655
 cacagcgtgt caccact 17

<210> 656
 <211> 766
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 2, 3, 4, 5, 7, 12, 24, 660, 723, 726, 752, 753, 760, 766
 <223> n = A,T,C or G

<400> 656
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 gcttgatatac gaattcctgc agcccccgag tgtgtgtgtg tgtgtctgtt tgtggagtgt 120
 ggtagctttt catctccaga ggggaaaaca caggcatgta tttgcttggt tttgttttcc 180
 cctgcctccc tctcgttcaa gccctcgtct ctatgcctcc ctcatccccg agcttctatt 240
 gtgtggctga gatgaaaact aaacagagcc gaacctgatc tctcctgtct gatgcacaca 300
 cacacacaca caccacacaca gacacacaca aagatgtgca tgctgcaga cgctctctgt 360
 gtgtgcctgc acgtctttag atcttcacac agttgccgcc aaagtcttct agagtttgtgt 420
 gcttatcact gttctctttc tgcgcattat actacgagtt ttcagcagca gtgatttcac 480
 caagtcgttt tgttcttttc gctttttcct ccgttacttc aaacagaagt agacaggaca 540
 gaaatgtctc acaatgaaat aaacactgaa atactggtag agcaagagcg aagatgagtc 600
 tgaaagatct cgatcgattc atgtgaagta ggactgctga tgagcctagt agaaggaccn 660
 tggatattgg gcctgatgaa acgggagggtg atagcgggag gaaggggtgca ttgatctgcc 720
 cancantgac aactgacaga caaacgcagg gnnttttgan acgcan 766

<210> 657
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 657
 atccccgagc ttctattgtg t 21

<210> 658
 <211> 16
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 658
 ggcggaact gtgtga 16

<210> 659
 <211> 227
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 659
 tatcgacagac acctatatgc aattactgta atgaccagga aatatcaaga ttgagatttt 60
 tctctgaaat atttatctca gctttgacgt gcatcagcaa gctcagacaa ttatgtacat 120
 taccctgtta cattattcct gaagacacac acacacacac acacacacac acacacacac 180
 agtctttatc tgctgatgaa aaatatgctt gagggcagct actaaat 227

<210> 660
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 660
 tctcagcttt gacgtgcatc 20

<210> 661
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 661
 gctgccctca agcatatttt 20

<210> 662
 <211> 315
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 662
 actgacaaac acacttgacg tgagacacag tgaaagtcaa tactcttcgc cttcttcctt 60
 tctcttcctt tgactccccg tctccttcac tcctctcacc aaacatccgc atctattcct 120
 gtcggacctc ctctcaaaac cacagaatac actcctcctc acacagacac acagacacac 180
 agacacacac acacatacac aactgacta accacagagg cagaggcatg atggagccac 240
 actaacaag cagccaccgg gaacacatga tgctgtgact caacatcatc cgtgcctgca 300
 gaggacatca aaaat 315

<210> 663
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 663
 ttcgccttct tcccttctct 20

<210> 664
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 664
 ttagtggtggc tccatcatgc 20

<210> 665
 <211> 620
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 2, 3, 4, 5, 7, 10, 15, 19, 21, 23, 25, 31, 32, 33, 48, 100,
 488, 503, 530, 590, 594, 620
 <223> n = A,T,C or G

<400> 665
 tnnnntnttn tcttngaana ngntnatctt nnngaatacc cggccccntt tcgagggtcga 60
 cggatatcgat aagcttgata tcgaattcct gcagccccc n gtgttgctca gtcgcaggaa 120
 tgggggttcc tctctatttc aacagcatta aacaaggcaa gaaagatcta acagtgcatt 180
 tatcccagat taaagccatt aaggaaaaaa ataagtcata ccctgcagtt tactaatttt 240
 cacatgagta ttcctgattg attccacgag ccaggctatg caaacctttg ccacccaatg 300
 aaaagagcag gagactccag tcagtgggaag gagtgtgtgt gtgtgtgtgt gtgtgtgtgt 360
 gagagagaga aagaggtctt aaggcgctcc actctaaacc tgccaagcat ccatcaagct 420
 cactctggct cctctcagct cacttaacat gtttccccct gcagtattct ggggctctga 480
 ccttgtttnc caacaacaca atnttttctg gcgaaaaaat gaaatatatn tgtatgaaaa 540
 tgggaaaaat ggttgctctt tggggtgctt ggctggaacc ttaacttttn tgncaaacg 600
 actggccatt gccttagacn 620

<210> 666
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 666
 ccaatgaaaa gagcaggaga 20

<210> 667
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 667
 cttggcaggt ttagagtga g 21

<210> 668
 <211> 810
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 3, 9, 18, 20, 32, 35, 619, 658, 704, 706, 723, 740, 747,
 755, 758, 761, 791, 795, 810
 <223> n = A,T,C or G

<400> 668
 aantttgant gcccttttnan cgcggccgtg gncgntctag aactagtga tccccacgc 60
 accagcagca atactcaaac gtcccgtatc ttccgaggaa aggggtgtgc atgtgggagt 120
 gtgtgtgtgt gtgtgtgtat gtgtgtgtgt gtgcttggca gtgacgaaag cgcagtata 180
 agaacacgtc cttttcacct aagtcacaaa atattaccat gtgttgcaac tccatatata 240
 ctcttttctt cttttatcat tcatttgta cacaatctg ctatctgtgt ccctgtgtgc 300

```

agcctacaaa aaacatgttt cagctccttt ttttttaatt ctgtgggctg caggaattcg 360
atatcaagct tatcgatacc gtcgacctcg agggggggcc cggtagccag cttttgttcc 420
cttttagtgag ggttaattgc gcgcttgggc gtaatcatgg tcatagctgt ttcctgtgtg 480
aaattgttat ccgctcaciaa ttccacaciaa catacgagcc ggaagcataa agtgtaaagc 540
ctggggtgcc taatgaagtg agctaactca cattaattgc gttgcgctca ctggccgctt 600
tccagtcggg aaacctgtng tgccagcttg cattaatgga atcgggcaac gccccggnga 660
gaaggccggt ttgccgtatt tgggccgctt tttccgcttt cttngnttac tgacttcggt 720
tgnngcttcgg gtcgttcggn tgccggnaac cggtnntngg nttaacttca aaggcgggga 780
aattccggtt ntccncagaa ttcagggggg 810

```

<210> 669

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 669

accagcagca atactcaaac 20

<210> 670

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 670

acagggacac agatagcaga t 21

<210> 671

<211> 834

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 7, 8, 9, 10, 11, 14, 16, 17, 18, 19, 20, 21, 23, 24, 31,
45, 46, 47, 68, 79, 84, 85, 86, 453, 467, 470, 473, 479, 489, 505, 513,
514, 517, 518, 519, 520, 521, 522, 525, 528, 530, 532, 544, 545, 546, 547, 555,
556, 557, 558, 559, 560

<223> n = A,T,C or G

<221> misc_feature

<222> 579, 592, 596, 602, 605, 608, 625, 630, 631, 632, 634, 637,
656, 672, 675, 676, 678, 679, 681, 687, 689, 692, 695, 696, 700, 701,
708, 710, 712, 717, 718, 719, 728, 729, 730, 731, 732, 739, 740, 741, 743, 744,
745, 746, 748, 755, 756

<223> n = A,T,C or G

<221> misc_feature

<222> 757, 758, 759, 765, 766, 768, 769, 770, 771, 772, 773, 788,
789, 790, 791, 792, 799, 800, 802, 803, 813, 814, 815, 819, 825, 829,
830, 831

<223> n = A,T,C or G

<400> 671

```

gagaggnnnn ngngnnnnn nannttatct ntgacatatg atctnnntga aacccccctc 60
gagtttangg aatcgatcnc ttgnnncgaa ttcttgacgc ccacagttgc tcctctgcat 120
tgtcccgaat ggaaaccaag acagtagcag tcttttagttt ataggatttt cctgacgttc 180
aagggtgtcaa tatgacagac tgatgataaa cagaaaaata tgtagcatth tcttgtccgc 240

```

```

agccggtttc cagtgagaag acaatgacaa catgacgagc tgattgtaag aggttagctc 300
agcaagcctc cacctgagag agcttagttg tttcagcacc agatgcccc ccccccccc 360
ccccacacac acacacacac acacacacac acacaccggc actgtgagtg accaaatgaa 420
aaagggatatg aatcaaagct gcggcgtcct cnggggggat ccactanttn tanagcggn 480
gccaccgng tggagctcca attcnccta tanngannnn nnatnacn cnctcactgg 540
ccnnnnnttt acaannnnnn gactgggaaa aaccttgng taccccaact tnaacnccct 600
tncanaanaa tccccctttt ccaanttgg nnantancca aaaaggcccc aaccnncatcg 660
ccctttccaa anaanntnnc ncaaccntna antgnnaaan nggaaaantn tnaaccnna 720
aaaatttnnn nntaaaaann ncnnnnanaa aattnnnnnt aaaannannn mnnatttttt 780
aacccaannn nnccaaatnn gnnaaaaacc ctnnnaaanc aaaanaaann nccc 834

```

<210> 672

<211> 19

<212> DNA

<213> *Oreochromis niloticus*

<400> 672

agccggtttc cagtgagaa 19

<210> 673

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 673

cgagctttg attcatatccc t 21

<210> 674

<211> 719

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 364, 470, 532, 548, 560, 561, 569, 588, 630, 637, 643, 649,
653, 658, 688, 698, 707, 708, 713, 715

<223> n = A,T,C or G

<400> 674

```

acctgtacgg atgggtgtga atgggtgaat gaggcattgt ggataaatca ctttgagtgt 60
tccagtagag cagataagcc ctatattaga acccgcccat tcaccatatt cacaatgaaa 120
atgtatctgt aatatctcat atgactcacc ctacagtcct cagacacaca gacatatgtc 180
aggttaacag gcagttctgc catgaaagag tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg 240
tgtgagagag agagagagag agagagagac gtgctataat gtatgattga gacatggcac 300
tgagaaaaat acaccaaact ggagttggca gagcctaaga ttttcaatat atgcaatttt 360
attngcacca aatcacagca tcagttgcct caagggtgatt tatactgtaa ggtaaagatc 420
ctacagtaat acagacaaaa ccagaacaat cagatgacct cctatcagcn accacttgg 480
gacagtggga aggaaaaaca ctcttttaac acaaagacat ggtagacag cntgttctaa 540
taattatnag ggtgaatacn ntaccacant ttatctgaat tagaaccnga aattagagat 600
atgcagcttt ggcttttagg ccttctgccn ttaactnggt tanctcctnt ggnttaanta 660
ataaagttgg ttggctgcag gaattcgntt tcagcttntt gttcctnnac ctngngggg 719

```

<210> 675

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

```

<400> 675
agtagagcag ataagcccta t                                     21

<210> 676
<211> 19
<212> DNA
<213> Oreochromis niloticus

<400> 676
gccatgtctc aatcataca                                     19

<210> 677
<211> 473
<212> DNA
<213> Oreochromis niloticus

<220>
<221> misc_feature
<222> 47, 48
<223> n = A,T,C or G

<400> 677
cccaccaggc tgtcaactaa caaagtcacc acaaacaagc acatcanngt caagggtgct 60
tcagggtgtgt ggaagcagaa gacaagcccc atttctacca gaacacacac acacacacac 120
acacacacac acacacacac acacacacac acacacacac acacacacac acacctatat 180
aagaaagaca gaggagaggg cttacgagag agacagaaaag tgttgagtca tgtggcgagc 240
acagaggggat cgtgacacat acatgggttac atttgtgaag cggacccttt ggtttccagg 300
ctgtgactga ttgtagaggg agaggtgacc ataataaaca acaacaggaa agtaaaattg 360
tttaaaaaaa aattcccaac caaatgtgaa gcacatgacc accacaacat acagtacgcc 420
atactattta ttaaataaatt acatttcaga tgcttccacc gtggcaccaa aat          473

<210> 678
<211> 20
<212> DNA
<213> Oreochromis niloticus

<400> 678
tcagggtgtgt ggaagcagaa                                     20

<210> 679
<211> 20
<212> DNA
<213> Oreochromis niloticus

<400> 679
acggtggagg catctgaaat                                     20

<210> 680
<211> 815
<212> DNA
<213> Oreochromis niloticus

<220>
<221> misc_feature
<222> 3, 4, 5, 6, 9, 10, 11, 12, 13, 16, 20, 32, 52, 598, 604,
        683, 708, 721, 729, 734, 751, 753, 755, 756, 759, 763, 767, 776, 782,
784, 791, 802, 813

```

<223> n = A,T,C or G

<400> 680

```

ttnnnntttnn nnnctntgtg aagctccctt tnggagtcct cctcgcaggt tngacgggtat 60
cgataagctt gatatcgaat tcctgcagcc cacatggcac acacactcac acaaatacac 120
aaatcgatag acagacacag atgccaacac acttatacat agatccacaa cgcacatata 180
caccgggctt ttgattacct cccaccttta tttcttctta gcatcctttc ccttgtgccc 240
cctccaatc cgaccctatc catatcccgt tgtttgtcct cctccctccc cctctacctt 300
acccctcatt gcagaacgca tgtaacacac acacacacac acacacacac acacacacac 360
acaccctaac ctgtcaggta acatcagaga aggggagagt tgaagagacg tgacagcatg 420
ctgaaggaat cgagtgccag gaacacagac ctctctctgt tcacctctgc tgtgctggaa 480
cacaacgagc tccagccctt cacttttgtt aaggatcaga cctgtttgga gagtgtgga 540
gaacctccaa cagtcaagg gagtgaagac acgctgagga aaggagatat tagagaanaa 600
gttntcgaga ggaagtctt gataatcaat aggcgccgga gaggtaagt tgaagaaga 660
agaaaacaaa ggcaggaaaa aangaaaga aaggcggtta atagggang ggggggggat 720
nccacttang tttntagaag ccgggcgaca ncngnngng gancttncaa attcgnctt 780
ananggggag nccgttttac cncgccctc ctngg 815

```

<210> 681

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 681

acagcgtagg ttgaggtaaa 20

<210> 682

<211> 17

<212> DNA

<213> *Oreochromis niloticus*

<400> 682

tcttcgctct ggtccaa 17

<210> 683

<211> 564

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 2, 469, 531, 533, 560

<223> n = A,T,C or G

<400> 683

```

angccgttgc tccccgcggt ggccggccgct ctagaactag tggatcccc cctatgactc 60
gatgccgcac acacatggag cctggaacac ctaaaactgt ataagatcaa caggaacctt 120
aaagccttca tcaggaactc agtgtggatg gcaaacaaca gtagaggtca acttcaagcc 180
catagcacia gtcagcatca agtgtgggat ctaccaagaa gaggtctgt cccactgct 240
gttctacagc aatgaataat aaataaaaaga cctcatagtc agtcagatct gaatgattaa 300
actgcagctt cttcacttca gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgttcactc 360
cagaaaaatg cagtctgact gctccgactg agtctaagtc agagtaaagt tcacatgctg 420
tgtaggggtg gttactcaaa acgaaaacaa aatattatgc attactggnt ccttttctta 480
aaagttatgc agaacattac ttagttacct cctgggagta agtcctctt nangaggata 540
aatctttcct ggcacaaaaa aaaa 564

```

<210> 684

<211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 684
 gtgggatcta ccaagaagag 20

<210> 685
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 685
 tttgagtaac caccctaaca c 21

<210> 686
 <211> 632
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 6, 9, 12, 22, 23, 24, 26, 30, 34, 36, 38, 495, 581, 588,
 631, 632
 <223> n = A,T,C or G

<400> 686
 ggggttnggnt anattgtgtt cnnnangctn gtcncncngg aaacgcccc cccttttcgag 60
 gtcgacggta tcgataagct tgatatcgaa ttcctgcagc ccaaaggag tttttcctcc 120
 ccactgtccc accgtatgaa gcactcggag gcgactgttg tgatttgtgc tgcaaagtaa 180
 tcgtccaagg tgtcccaatg atgtgtttca gtgtggctgc tgaggaagag gagttgcttc 240
 atcaatttga actgtagctc aggatcagca gactcgggcc tcacccatgga tacaggcagc 300
 agccatgaca gctgacgctg cagtgtgaca gatccgggag agcagggtcag gctggaccca 360
 ctgtgacccc tgtgttcaca cacacacaca cacacacaca cacacacaca cacacacaca 420
 tgcagcctgt aacacagtaa ccctgaacgt gccttactgg gggggatcca ctagttctag 480
 agcggccgcc accgnggtgg agctccaatt cgccctatag tgagtcgtat tacgcgcgct 540
 cactggccgt agttttacaa cagtcgtgac tgggaaaacc ntggcgtnac cccaacttaa 600
 tcgccttgca gcacattccc cttttggcag nn 632

<210> 687
 <211> 16
 <212> DNA
 <213> Oreochromis niloticus

<400> 687
 cgggagagca gggtcag 16

<210> 688
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 688
 cacgttcagg gttactgtgt t 21

<210> 689
 <211> 625

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 2, 3, 4, 5, 7, 8, 19, 33, 527, 530, 532, 534, 540, 544,
552, 556, 583, 625

<223> n = A,T,C or G

<400> 689

```

tnnnntnntt ggtttgacna ccttgggtac cgngccccc ctcgaggtcg acggtatcga 60
taagcttgat atcgaattcc tgcagcccac ctctgctctt ctttggtttg atgactattt 120
gtccataagt gacgtcagtt ctactgctg agtcgactgc agctggatca gtctctgcac 180
agtaaaacac acacacacac acacacacac acacacacac acacacacac acacacacac 240
aggtgtagaa actactttgt atgaacgact tcccatcagg atgcactcag aggggtagag 300
tatcccctca gatgtctaca gctctgtgct gagccccctg ctccatactt tctactcata 360
cgactgcagc cagctacaca ttcataaaat ctgaatgggc agagtttcag gctgagagca 420
gccaaaca ggaagtttct gctgtggttt tactcaattc tgtttgcaga aattaaaata 480
aaaggttttg gggggatcca cttagttcta gagcgccgc caccgnggn gnantccan 540
ttcncctata gngagntccg tattacgcgc gtcctggcc cgntcgttta caaacgttcg 600
tgactgggaa aaccctgggg cgtnn 625

```

<210> 690

<211> 19

<212> DNA

<213> *Oreochromis niloticus*

<400> 690

```

gcagctggat cagtctctg 19

```

<210> 691

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 691

```

tggaagtcg ttcatacaaa g 21

```

<210> 692

<211> 619

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 7, 9, 13, 20, 586, 619

<223> n = A,T,C or G

<400> 692

```

ttgaatncnt tngtaccgn gccccccctc gaggtcgacg gtatcgataa gcttgatata 60
gaattcctgc agccccggt cactatctag gacaccagcg gcggcgactt gtagtgtaac 120
tttgacacac aacagtgttt tctcactccc ccagatctc tttccatctc tcacacacac 180
acacacacac acacacacac acacacagga aagggaagc agcgtgtcct gcaaccatca 240
gcactttcac cgtgtcctc gccagaccgt cccgtctcct tctcatgtcc ttaatgactc 300
tcccacttgg cgtcctctct ccctcacctc cctaccgcct ttcctcctgc accgtcaatg 360
ccctccatcc tactccagca ccagttttg ggggatccac tagttctaga gcggccgcca 420
cgcggtggag ctccaattcg cctatagtga gtccgtatta cgcgcgctca ctggcccgtc 480

```

gttttacaac ggtcgtgact gggaaaaccc tgggcgttac ccaacttaat cgccttgcag 540
 cacattcccc tttcgcagct tgggcgtaat agcgaagag cccgancccg atcggccttt 600
 ccaaacaagt gcgcaagcn 619

<210> 693
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 693
 cggcggcgac ttgtagtgta a 21

<210> 694
 <211> 18
 <212> DNA
 <213> Oreochromis niloticus

<400> 694
 ggacggtctg gcgaggac 18

<210> 695
 <211> 794
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 3, 9, 13, 25, 34, 631, 642, 646, 675, 681, 683, 688, 712,
 733, 763, 782, 786, 790, 792
 <223> n = A,T,C or G

<400> 695
 tgnnttgant gcntttgacc gcggngggcg cgnntctaga actagtggat cccccaaaagc 60
 tttggagggt cctcaagcct taataaaaagc caccagtttt cactctaaag atgcttctcc 120
 tactaccgct gttctgtcca ggtcaaggaa gtttgagtcc cacctctccc atcgtcctgg 180
 agaagccaga gagcctcaac actgtcacct tcagcgagga ctctgtgtaa gcgcgcacat 240
 gagtaaacac acacacacac acacacacac acacacacac atacacacaa aaatcagcta 300
 ttaataaacc gtctgcatgc ttcataatta cagacaatgc tcagagaagt gtgtgatgaa 360
 caactacttc ggcacgggg gctgcaggaa ttcgatatca agcttatcga taccgtcgac 420
 ctcgaggggg gggccgggtac ccagcttttg ttcccttag tgagggttaa ttgcgcgctt 480
 gggcgtaatc atgggtcatag ctgtttcctg tgtgaaattg ttatccgctc acaattccac 540
 acaacatacg agccggaagc ataaagtgtg aagcctgggg gtgcctaata agtgagctaa 600
 ctcacattaa tttggcggtg cgctcactgg nccgcttttc angtcnggga aaccctgggtc 660
 gtgcccagct ggcanttaaa ngnaattngg ccaacgcccc gggagaaggc cngtttggcg 720
 tatgtggcg ctntttccgc tttcttgggt taactgactt ggntggcttg gggccgttcg 780
 gnttgnnggn ancc 794

<210> 696
 <211> 18
 <212> DNA
 <213> Oreochromis niloticus

<400> 696
 cgctgttctg tccaggtc 18

<210> 697
 <211> 21

<212> DNA
 <213> Oreochromis niloticus

<400> 697
 gccgaagtag ttgttcatca c 21

<210> 698
 <211> 691
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 5, 24, 274, 309, 328, 359, 367, 377, 379, 395, 418, 445,
 446, 447, 450, 454, 458, 460, 465, 466, 467, 473, 482, 491, 505, 506,
 511, 512, 513, 517, 522, 523, 524, 529, 533, 536, 537, 538, 549, 557, 562, 563,
 564, 566, 570, 573, 576
 <223> n = A,T,C or G
 <221> misc_feature
 <222> 583, 592, 594, 596, 597, 600, 601, 605, 608, 609, 615, 617,
 618, 622, 628, 639, 643, 644, 653, 655, 657, 660, 665, 676, 680, 681, 688
 <223> n = A,T,C or G

<400> 698
 ttgancctt gcattaccgc ggcngttgcc gttctagacc tagtggatcc cccactcgtt 60
 gattagagca agctgacctg aagttgttta catatattca ataacaaagc aaactaaaac 120
 cctttttatt ctgacaggca cacctaataa ctgtgtgtgt gtgtgtgtgt gtgtgtgtgt 180
 gtgtgtgtgt gtgtgtgtgt gtagggatgt taaactttga ttttatttat ctgtgaagct 240
 ttattgtgta accctacata tgtctttata tttntatcac ctatgttgag cacacggagt 300
 ttatgtgtna tgaaatgtgg tatataanta aaattgcca tgtcaatgtg gtatcgtant 360
 gatctgntaa aatcagntnc tgcttgagaa aatgnntcac aacacactgt tacctggnaa 420
 caactgcttc tgtaaaaatg accgnnnngcn accngtntn ctttnnnct canagaattc 480
 cnattttctaa nctttatcca taccnntcct nnnttcnaag gnnnggggnc ccnggnnncc 540
 caaacttct tgttcnctt tnnncntaan ggnttnaaac ttnccatct cntntnnccn 600
 ntaanttnna tatcncnntt anccttgntt ttccttgng gannaaaaa ttntntnatn 660
 tccnttttc cataantctn ncctcctncc g 691

<210> 699
 <211> 19
 <212> DNA
 <213> Oreochromis niloticus

<400> 699
 ttttattctg acaggcaca 19

<210> 700
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 700
 aaaatcaaag tttaacatcc c 21

<210> 701
 <211> 340
 <212> DNA

<213> Oreochromis niloticus

<400> 701

```
gtttgtgagt ctgtgcagaa atggcagagc aagcgtgtca gatgaagaaa aatgctgttg 60
tagaagtaaa tgagccaaag tcctgaaaga caggagggtg ggagagttat tttcagaaag 120
gtcatagact ctgtgatcca ttaatgttga caccgataaa gttccctact gaagcatgca 180
tatagtccac aactgtctac atctggctcc agtaactttc tgctccactg actgtatgtc 240
cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca cacacacgca 300
gtatcatact cagggtgtggg cggaggacct gtcctcttgg 340
```

<210> 702

<211> 20

<212> DNA

<213> Oreochromis niloticus

<400> 702

```
tgaaagacag gaggtgtgga 20
```

<210> 703

<211> 20

<212> DNA

<213> Oreochromis niloticus

<400> 703

```
cgccacacc tgagtatgat 20
```

<210> 704

<211> 421

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 355

<223> n = A,T,C or G

<400> 704

```
ctcagtgcta aagatattgt aaaatgtgtg agtgtgagtg cactctggtc tctgggtggac 60
aaatgatgtg ataaaaaac cacacacaca cacacacaca cacacacaca gagtgtagct 120
gtagtgcag taaatgttgt taaatacagt gctgtaataa acttcacttc acacttagag 180
tttcctcatt ctgtgttatt ccctctgttt caggcatgga cagcagacta gtcctcactc 240
tcctgtttgt gatgctgact ggggtgtttca tgggcactta tgctcaaaat aatacaacca 300
gtgtgactcc agcaaccagc acaaacta ccagcagcaa caccaacacc acctncaaca 360
ccaacaccac agcaaccatcc agcaacacca gcacatcagc aacaaccagt acgaactcat 420
t 421
```

<210> 705

<211> 20

<212> DNA

<213> Oreochromis niloticus

<400> 705

```
gtgcactctg gtctctggtg 20
```

<210> 706

<211> 20

<212> DNA

<213> Oreochromis niloticus

<400> 706

ctgtccatgc ctgaaacaga

20

<210> 707

<211> 636

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 5, 25, 40, 45, 249, 342, 347, 400, 424, 425, 473, 483, 493,
500, 509, 510, 519, 537, 540, 544, 554, 556, 558, 561, 571, 573, 574,
581, 585, 594, 597, 598, 602, 613, 616, 617, 620, 623, 624, 627, 628, 629, 630,
634

<223> n = A,T,C or G

<400> 707

ttgantccat tgcattttccg cggcngttgc cgttctagan ctagnnggatc cccacacaccg 60
catgggtaat actgtatgca ttacatgcat gagcagctaa gtgtgcccct cggtgagttt 120
tctgttgctc tgactcatat ttattctgaa agcagaacac aagtgattcc tccccaacag 180
taaaatgtat atatacaatg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg 240
tgtgtgtgng gaccagagtg ctcatcaaaa tcctgtcatg gctctagagc gtgtgttttt 300
acccacagca ggggagttat ttgagtgtgt gactgcatgt angtggncag accttccggg 360
tgtttttgat gttttatact ggggggctgc aggaatttcn atatcaagct tategatacc 420
gtcnnccctt agggggggcc cggcaccag cttttgttcc ctttagtgag ggnttaattg 480
ccncttggcg ttntcatggn catagctggn tcctgtgng aaattgttat ccgctcncan 540
tttnacaca tatncnancc nggaagcata nannggtaaa ncctnggggt gccnaannga 600
gntgaactaa ctnacnnttn tcnnngcnnn cccncc 636

<210> 708

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 708

gtgattcctc cccaacagta a

21

<210> 709

<211> 19

<212> DNA

<213> Oreochromis niloticus

<400> 709

agccatgaca ggattttga

19

<210> 710

<211> 780

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 3, 4, 15, 18, 44, 45, 519, 573, 631, 636, 664, 667, 670,
685, 689, 692, 704, 710, 713, 715, 730, 736, 749, 752, 762, 763

<223> n = A,T,C or G

<400> 710

```

tttnnaagccc ttggnagncc ccctcgaggt tgacgggtatc gatnngcttg atatcgaatt 60
cctgcagccc ccttccactg ttgaagctgt cacaggattt gatagaagag catatgattg 120
ctacacctgc acttgcttgc ttttcacttt tcacctcttt agttacatta aaaagtctca 180
gtttgtttgg cttacacaca tgcttgaaaa gacacactta tctcactcac acacacacac 240
acacacacac acacacacac acacacacac acacacacac acacacagac gtctcacctg 300
ttttactagg taaggctcaa aacggatcat ctaagccaat cacctttcag gaagcaggga 360
tcagccaaaa tctcctcaat taatagctaa agtaaccttc agtgacctga ctgtggtcta 420
ccacaaacac acccacactt acacacagac atgcgcgcac ttacacacac actctctctc 480
tattgtcggg ccatattacca ttagtctggg attttttnt attcatttga gtatagctta 540
gtattagtaa acatgtgagg aacaggatca agnatgtgag gcacatctat ctatctaaac 600
tgtaagggtg gactgacctt ttccctacct ntagnngctt agatgaaaag atgaatgcct 660
gtcngngtn aacaccgat tttntttng gnaacaaaaa ctgntggacn ttntngctgg 720
cagcaacccn tccttngata ggactgaana gnccctgtc ttnnaactggg tttttatttg 780

```

<210> 711

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 711

```

gtctcagttt gtttggctta c 21

```

<210> 712

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 712

```

aggtgattgg cttagatgat 20

```

<210> 713

<211> 637

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 22, 577, 598, 611

<223> n = A,T,C or G

<400> 713

```

gcctttgctc cccgcggtgg cngccgctct agaactagtg gatccccac atactgatag 60
ccgtgggagc tgttatgatg cttgtgggct tccttggatg gtatggtgcc attcaggaat 120
ctcagtgcct tctgggcaca gtgagtatac cgttttatcc acaagtgaca ctttttttca 180
aataaagtat tttaatcttt ggagtcactg aagttaaaat aaatatcttt gatttctagt 240
tcttcttctt tttggtgatc ctgtttgcct gtgaagtggc tgcagcaatc tggggtttca 300
tgaacaggga cactgtaagc gcacgcacac acgcacacac agacacacac acacacacac 360
acactgtcac ggctcacagc ttgtttgatg tctgcattga tgttccttct ctgctcctgt 420
agtgaatcat ctctgtttgt tgctgtgtct tttgggctgc aggaattcga tatcaagctt 480
atcgataccc gtcgacctcg agggggggcc ccggtaccca gctttttgtt ccctttagtg 540
gaaggggtta aattgcgcct ttgggcgtaa tcatggncat tagctgttct cctggggnga 600
aaattggtat ncgcttaciaa tttcccacia catacga 637

```

<210> 714

```

<211> 21
<212> DNA
<213> Oreochromis niloticus

<400> 714
accgttttat ccacaagtga c 21

<210> 715
<211> 19
<212> DNA
<213> Oreochromis niloticus

<400> 715
caggagcaga gaaggaaca 19

<210> 716
<211> 155
<212> DNA
<213> Oreochromis niloticus

<220>
<221> misc_feature
<222> 8, 43
<223> n = A,T,C or G

<400> 716
ctgacaanac aatgagctct gcttctccag tgtgagcgcg acnaaccttg gacaactaac 60
acacacacac actcacacac acacacacac acacacacac acacacacac acacgcagac 120
actccacgct gactgtcttg gcaaaagagt tatgt 155

<210> 717
<211> 20
<212> DNA
<213> Oreochromis niloticus

<400> 717
tgagctctgc ttctccagtg 20

<210> 718
<211> 20
<212> DNA
<213> Oreochromis niloticus

<400> 718
cagtcagcgt ggagtgtctg 20

<210> 719
<211> 594
<212> DNA
<213> Oreochromis niloticus

<220>
<221> misc_feature
<222> 2, 4, 6, 9, 19, 30, 31, 34, 35, 52, 76, 99, 100, 128, 528,
547, 573, 590, 594
<223> n = A,T,C or G

```

<400> 719

```

gnngtnatnt tatttgtnt agtaatctan nttngctcc gccctttgtt anacgaccg 60
tctcgataag cttganatcg aattcctgca gccattcnn agaaatttct cgtatttcat 120
gcgggggnca aaccacacct gattaaatcc tactggcaaa gacacacaca tacacacaca 180
cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca 240
ctactacact gagtaaaatg ggtaagatct gttgtgacgg tcagaggaat gtaaggagag 300
ctgaggtgaa gtggtgctgc tgcaccagag aggttgtcat ggagaacgaa acccaaaaag 360
agacgtggtg atcgataatg cttccttatt ctcacaagag gtcatacagg ttacagagga 420
gtgggggatc cactagtctc agagcggccg ccaccgcggt ggagctcaa ttcgccctat 480
agtgagtcgt attacgcgcg ctcactggcc cgtcgtttta caaacgtngt gactgggaaa 540
acccttngcg ttaccaact taatcgctt ggnaacacat tccccttttn gcan 594

```

<210> 720

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 720

```

aatttctcgt atttcatgct a 21

```

<210> 721

<211> 19

<212> DNA

<213> *Oreochromis niloticus*

<400> 721

```

tccttacatt cctctgacc 19

```

<210> 722

<211> 605

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

```

<222> 8, 9, 13, 33, 38, 43, 456, 469, 478, 502, 512, 515, 529,
      530, 549, 554, 587, 593, 605

```

<223> n = A,T,C or G

<400> 722

```

tcttgttnna tcncttggac acccgccct ttngaggncg acngtatcga taagcttgat 60
atcgaattcc tgcagcccag agggagggag ggacgaggtc agtgggggtc atttccatcc 120
ggcaaacctc aaacagacac atgcacacac acacacacac acacacacac acacacacac 180
acacacacaa acaagaactt gtatggagca gagttttcca gcaggagctc aatttgtgtt 240
tgggctcact tacactatta tattggtcca gtatgatctc agctcagact gagtctaaat 300
gtctctgtct gcctatttgt aggtgggatt gtgtgtatgt gtgtgtctgt gtgcaagcga 360
aatgtggggg atccactagt tctagagcgg ccgccaccgc ggtggagctc caattcgccc 420
tatagtgaag cgtattacgc gcgctcactg gccgtngttt tacaacgtng tgactggnaa 480
aaccctggcg ttaccaact tnatcgctt gnagnacatt ccccttttnn gcagcttggc 540
gttaatagnc gaanaggccc cggaccgaat cggccctttc caaacanttt gcncagcct 600
tgaan 605

```

<210> 723

<211> 18

<212> DNA

<213> *Oreochromis niloticus*

<400> 723
gtcagtgggg ttcatttc 18

<210> 724
<211> 21
<212> DNA
<213> Oreochromis niloticus

<400> 724
aggcagacag agacatttag a 21

<210> 725
<211> 488
<212> DNA
<213> Oreochromis niloticus

<220>
<221> misc_feature
<222> 18, 93, 262, 378, 411, 447
<223> n = A,T,C or G

<400> 725
atatgtacct tgctttcnaa tacgctctct agataaagcc tgaccttcag ttttctctgc 60
agtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgnrcgtgcg tgcgtgtgtg tgtgtgcagt 120
tgttcttccc ttttgctctt atgaagctgt tatgcagaga aaactcttgt catgtaaadc 180
tcatcttttag ctgtctgtcc tttccttttg gtggctagct gttcgggtag atatagtatt 240
tgctcttatt gcttgaagct gnggggacgg aggttttcta tatgaagaat gatttttaaatt 300
aaattcatta ttcagctcag taaagtttta ttaaaccctt ggggcatgtt ggagggcgctc 360
gcgtgaactg aagggcanac ccacatatct caaccatgta tacttattaa naaattgatg 420
tgccttgctg cttaaactgc tgtgcangca ggtgcacaaa tgtaaccgat cactttaattg 480
ttttatga 488

<210> 726
<211> 20
<212> DNA
<213> Oreochromis niloticus

<400> 726
gcctgacctt cagttttctc 20

<210> 727
<211> 20
<212> DNA
<213> Oreochromis niloticus

<400> 727
gaacagctag ccacccaaag 20

<210> 728
<211> 782
<212> DNA
<213> Oreochromis niloticus

<220>
<221> misc_feature
<222> 7, 20, 24, 32, 486, 510, 512, 531, 555, 611, 661, 694, 713,
725, 728, 730, 741, 748, 752, 755, 756, 762, 770, 781

<223> n = A,T,C or G

<400> 728

```

tttgaantcc ctttgaacgn ggcnngcggcc gntctagaac tagtggatcc cccccattt 60
aagatcagtg tccttaataa ccacacccaa gacctcacac ccaatgagat gatgagggga 120
ggtcacagat cacatcagat tagtgcagct tgttttgctt tggcggttga agcccccatg 180
cctcacatgc gcaaacacac acacacacac acacacacac acacacacac acacacacac 240
acacacacac acacacacac acacacacgt gcacagacac taccagcttg tctactgctgc 300
cctcttaatg tgaaagcaag tatattttga cagataacaa atgagtggca ggagaacaca 360
gtgggctgca ggaattcgat atcaagctta tcgataccgt cgacctcgag gggggggccc 420
gtcccagctt ttgttccctt tagtgagggg taattgcgcg cttggcgtaa tcatggtcac 480
agctgnttcc tgtgggaaat tggatatccgn tnacaattca cacaacatac nagccggaag 540
cataaagtgt aaagnctggg gtgcctaata agtgagctaa ctcacattaa ttgcgttgcg 600
ctactggccg ntthccagtc gggaaactgt cgtgccagct gcattaatga atcgggcaac 660
ncgcggtgag agggccgtttg cgtattgggc gctntttcgc tttcttcggt tantggcttg 720
attgntnngn aagttcgggt ncgggagngg tntannttac tnaaaggcgn aatcggtttt 780
nt

```

<210> 729

<211> 19

<212> DNA

<213> *Oreochromis niloticus*

<400> 729

```

atgagatgat gaggggagg

```

19

<210> 730

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 730

```

gcagtgacaa gctggtagtg t

```

21

<210> 731

<211> 598

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 5, 6, 8, 19, 34, 37, 85, 113, 570, 587, 597, 598

<223> n = A,T,C or G

<400> 731

```

ttganntntg aagcctttng aatacccctt cccnttntgg aggtcgacgg tatcgataag 60
cttgatatcg aattcctgca gccnttcac acacacatac agagacagtg tgntagcgga 120
agtccaaagt gaccaaagtg ttcagggaga gacggtgatg aagcacacac agctaagctg 180
ctacagttat agttggatgc tctgaccaca tactgactag atagactgac cacagttcac 240
cacatcactg ctaaaaagaa agactatgag gtcagggtgat aatcactacg aacagttaca 300
cacacttcat cacttcatcc acacacgcgc gcacacacac acacacacac acacacacac 360
aggttggcat taccttaagt ttagctgtgt taggctgtgg gggatccact agttctagag 420
cgcccgccac cgcggtggag ctccaattcg ccctatagtg agtcgtatta cgcgcgctca 480
ctggccgctg ttttacaacg tcgtgactgg gaaaaccctt ggcgttaccc aacttaatcg 540
ccttgacgca catccccctt tcgccagctn ggcgtaatag cgaagangcc ccaccnn 598

```

<210> 732

<211> 17
 <212> DNA
 <213> Oreochromis niloticus

<400> 732
 cggtgatgaa gcacaac 17

<210> 733
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 733
 agctaaactt aaggtaatgc c 21

<210> 734
 <211> 256
 <212> DNA
 <213> Oreochromis niloticus

<400> 734
 acgctcgcac caggaagcaa ctcaatggct ccttttgatg ctctttaatg atatacagta 60
 tttcattacc actctcacca cacacacaca cacacacaca cacacacaca cacacacaca 120
 cacacacaca cacacacaca cacacaacta ttataagaaa gaccatcaca aatgggtatac 180
 acatccatgt aacgtcaata aaaaacacat tttgttattt atagccacag ccgtttcaca 240
 cacaagcaca tagtgt 256

<210> 735
 <211> 18
 <212> DNA
 <213> Oreochromis niloticus

<400> 735
 gcaccaggaa gcaactca 18

<210> 736
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 736
 cggtgtggc tataaataac a 21

<210> 737
 <211> 610
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 2, 3, 5, 18, 20, 29, 34, 40, 42, 610
 <223> n = A,T,C or G

<400> 737
 tnnntnttttg gacaactnan ctcttgana cccngcccn tntcgaggtc gacggatatcg 60
 ataagcttga tatcgaattc ctgcagccca cctcttaagt tgcactagct cagggttctt 120
 ctctgccaca gagatgacat tccattgttc tgtccactga gacaaagtta aaattaccgg 180

```

taataattag tgtaaattgct gattaagcag tcacagtatt gagatccaaa tcacaaacac 240
acaggcacac acgtgcacac atgcgaacac acacacacac acacacacac acacacacac 300
acatacacat acacatacac acacatacac cagattttct gcaaattattc tgggttcttca 360
ttgggagattc ttgagattag aaatgtaaaa tacataattt aactcttcaa gttattttaa 420
gaggctttct ttttccccac agcttttcagt ttgatctctt gcgtttttaga catgaaggcg 480
cccgttgta cccgttgta actgttttagg ttcctcccg ctttcacaca cgccctctct 540
ctttggttg tctgaactgt gcccctgtgg gctgcattgg cagaaaggag ttttctgggg 600
gcatttgctn 610

```

<210> 738

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 738

tctgccacag agatgacatt c 21

<210> 739

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 739

agctgtgggg aaaaagaaaag 20

<210> 740

<211> 434

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 434

<223> n = A,T,C or G

<400> 740

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aaattaactc tccaatttct gccaaagcaga gtggtcaa atcagactca gttttattgt 60
cattcaacaa tttgacatga tatgaatgaa acacagttac ttaggtcttg gcattgcac 120
atgtaccac acaacaagtg aaacagtagg aagaataaat aattaccaa agaaagtaag 180
aaaatatgca ggtgtaatat gtgcaacttg ataagcaaat atcaaatac aaaaaaagt 240
gtcacacac acacacacac acacacacac acacacacac acacacacac acacacacac 300
acacacacac acacggctca caaaatttca aaatcccttg tagcccttg gccaggcacg 360
cttcagtttt tggtagcccc aattaaaaag agaacaattt ttttactgat gtcttgtttc 420
ctttacaata ttgn 434

```

<210> 741

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 741

gttacttagg tcttggcatt g 21

<210> 742

<211> 18

<212> DNA

<213> *Oreochromis niloticus*

<400> 742
gctaccaggg atttttgaa 18

<210> 743
<211> 558
<212> DNA
<213> *Oreochromis niloticus*

<220>
<221> misc_feature
<222> 475, 503, 540
<223> n = A,T,C or G

<400> 743
tttttgggca gcaacaggac gtgaacagac gtatatcagt caactggagg ctaccagtcc 60
aaagctgtgg aacaataaac ataacagagc gaatgcactc acacacacac acacacacac 120
acacacacac acacacacac acagaagggg agacaatggt gttttccatg gaaacatctc 180
tttgctgttg caaggactgc tgcatacttt atgtcacaca tgacacagac cctgaccact 240
cttacagtgt tagtaaacad acagaaatac catatttgtg cttcatgttg tctctgcttt 300
acacctgtaa ccacatgcac atggtgcatt aattgtgcta cactaaagat gcaaatttga 360
cctttttcca ccaacgctgc accactgctg gtcccgtgtg gaaaagggtat tgaatgaagg 420
cagagggggga aattataatt ctggcagagc cctcttctgc ttatagcatc tctgncattc 480
attcctcctc attcttcctt ctncagctta aatgcctttc ttcttctgct atggcctttt 540
caacacccac ccaacact 558

<210> 744
<211> 23
<212> DNA
<213> *Oreochromis niloticus*

<400> 744
taaacataac agagcgaatg cta 23

<210> 745
<211> 18
<212> DNA
<213> *Oreochromis niloticus*

<400> 745
cgttggtgga aaaagggtc 18

<210> 746
<211> 523
<212> DNA
<213> *Oreochromis niloticus*

<220>
<221> misc_feature
<222> 400, 418, 419, 511, 523
<223> n = A,T,C or G

<400> 746
tgattgcact gctggatggt ggtatccttg ctgtgatact gtaagtcata tgagggtggt 60
ctctctctct ctgatatttg ctataacaga caaactatga ccccccttgt ttgtgttttt 120
gaagccagtg atttaatgac ctctgctat ctagactgaa aagagtgaag gttattctgg 180
acaaaagtgt aaacttgatt agaaattttt ttcaactgtc ttataattat tggctcactc 240

```

aatttgtatt ttatttttatt tgtattattht gttgcagaca taaaacacac acacacacac 300
acacacacac acacacacac acacacacac acacacacac tattgtttct ctaatggcaa 360
ttaggcaaag gttcatctgg tagggtaggt tgaaattaan aagtgggggg atccactnng 420
tctagagcgg ccgccaccgc ggtgggagct ccaattcgcc ctatagttag tcgtattacg 480
cgcgctcact ggcgcgtcgtt tacaacgtcg ngactgggga aan 523

```

<210> 747

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 747

ccccttgttt gtgtttttga 20

<210> 748

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 748

ccagatgaac ctttgcctaa t 21

<210> 749

<211> 568

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 1, 2, 475

<223> n = A,T,C or G

<400> 749

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nntttgaagc ctttgctccc cgcggtggcg gccgctctag aactagtggg tccccacaa 60
cagctggtaa cagacacaga acagaactga gctgtcacat ctacactgca gagctgacac 120
acacacacac acacacacga tagtgctgaa actttaatac aaacacatac acacacatgc 180
tgacatacat ataccagcaa ctgcactaat tctctctctc tcacgcacac acacacacac 240
acaccagtat acatatgagc aatccagtct tgatctatga gctgtggaaa agccagctga 300
tatttttcat gtgtgttccc tttatcagag ctcagttctg caggtcttct ctctgattct 360
tatctgtggc agatgaagca agaacttcct ggatcccaca gggggctgca ggaattcgat 420
atcaagctta tcgataccgt cgacctcgag ggggggcccg gtaccagct tttgntccct 480
ttagtgaggg ttaattgcgc gcttggcgta atcatggtca tagctgttct ctgtgtgaaa 540
ttggtatccg ctcacaattc cacacaat 568

```

<210> 750

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 750

accagcaact gcactaattc t 21

<210> 751

<211> 17

<212> DNA

<213> *Oreochromis niloticus*

<400> 751
cagctggctt ttccaca 17

<210> 752
<211> 593
<212> DNA
<213> Oreochromis niloticus

<220>
<221> misc_feature
<222> 2, 4, 6, 7, 14, 26, 38, 532, 573, 592
<223> n = A,T,C or G

<400> 752
tntntnnttg attngaattcc ttgganctcc ccgcggtngc ggccgctcta gaactagtgg 60
atcccccccc tcaactgcttc ccccaagcca tcagactcct gaacactcgg tgactggact 120
gacacacaca cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca 180
caccttcata catcaagtaa ctttttgcac aatgctcagt cttttgcaca acccaccgtc 240
attgttgcac ttttctattg cactgttgtg tcttgtgtct gtatcgttct gttctgtggg 300
gtctttgttt cgtttttttg caatttttgc acacttgcac tttatgtagt cctgtgatga 360
ttgtctgtta tatgtcataa gtagcaccat ggtcttggag caacgttgtc tcgattcact 420
gtgtgctgtg ggctgcagga attcgatatc aagcttatcg ataccgtcga cctcgagggg 480
gggcccggta ccagactttt gttcccttta gtgaggggta attgcgcgct tnggcgtaat 540
catggtcata gctgggtttcc tgtgtgaaat tgntatcccg ctcacaattc cnt 593

<210> 753
<211> 17
<212> DNA
<213> Oreochromis niloticus

<400> 753
ccccaagcca tcagact 17

<210> 754
<211> 21
<212> DNA
<213> Oreochromis niloticus

<400> 754
aaaacgaaac aaagacacca c 21

<210> 755
<211> 600
<212> DNA
<213> Oreochromis niloticus

<220>
<221> misc_feature
<222> 10, 12, 484, 555, 557, 586, 600
<223> n = A,T,C or G

<400> 755
ttgttgaccn cntggagctc ccgcggtgg cgccgctct agaactagt gatcccccaa 60
atgacaaaag acaggatcag tcattctcac acacacacac acacacacac acacacacac 120
acaaacctgt aattgccact aatattaaca ctcggctcaa ttttaattgt attagaagag 180
acagcatgtg catggagctg tttgcttctc gtttccatgt taatgagctg atggctgcaa 240
ttaaactgtg atcctgttag acttcgattc caagggagga gacaggagga ggggaaagt 300

agggaggagg aggtgattaa gagaggaatg aagaggggaa ataaagagga aagaaaagg 360
 ggctgcagga attcgatatc aagcttatcg ataccgtcga cctcgagggg gggcccggta 420
 cccagctttt gttcccttta gtgagggtta attgcgcgct tggcgtaatc atggtcata 480
 ctgnttcctg tgtgaaattg ttatccgctc acaattccac acaacatacg agccggaagc 540
 ataaaagtgt aaacntnggg tgctaattgag tgagctactc cattanttgc gttcgctccn 600

<210> 756

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 756

atgacaaaag acaggatcag t 21

<210> 757

<211> 18

<212> DNA

<213> *Oreochromis niloticus*

<400> 757

tcccctcttc attcctct 18

<210> 758

<211> 527

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 17, 20, 28, 35, 72, 92, 95, 98, 116, 290, 423, 449, 452,
 469, 479, 482, 496, 518

<223> n = A,T,C or G

<400> 758

ttgttccttc cttgccnccn tttgttgngg acctnctaga actagtggat cccccagat 60
 gacatatatt ttagctgcca atcactcata tngnggnac agaaactcca gtgcangggc 120
 acaaacacac aatctctcaa tcatactttt gcatgcaaac tttcagtcac tgtcttaatc 180
 tttggctggc acacacacag acacacacac acacacacac acacgcacgt acataaccaa 240
 aaaaaataaa tgcaaaagtcg atactgtcaa gtaaaaaatt gcagtgcagn gcagcattca 300
 acaggtgact caacagaagg tgggtcaaaat cttaaaaacca aacatgcagt catcacagat 360
 aaaatgaaaa taactataca gaacagactt tcttccattt tactgtgggc tgcaggaatt 420
 tcnatatcaa gcttattgat accgtcganc tntagggggg gccccggtn cccagtttnt 480
 gntccctttt agtganggtt aattgcgcgc tttggcgnta ttcattg 527

<210> 759

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 759

tgcaaaacttt cagtcactgt c 21

<210> 760

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 760
gatttttgacc accttctgtt g 21

<210> 761
<211> 351
<212> DNA
<213> *Oreochromis niloticus*

<400> 761
agccgatgcc acatctgttt gtcattgttag cacttaagcg cctgcaggag ccatgatgct 60
aagtggagac agagtcctct ctcccactct ctccatccac cctttctcct aattacattt 120
gttcattaat ccattttctg ccacactctc tttcttggtt atgttcttgc atcagtgggc 180
ttttgcctcc tccgaccagc agacagtgc ctttaaggag atgccagaag actctgtaag 240
acaatgttac cccttcaccc tctcgctaaa tgcacacata cacacacaca cacacacaca 300
cacacacaca cacacacaca cacacacaca cccttaccca gtcccatcct t 351

<210> 762
<211> 19
<212> DNA
<213> *Oreochromis niloticus*

<400> 762
ccgaccagca gacagtgc 19

<210> 763
<211> 20
<212> DNA
<213> *Oreochromis niloticus*

<400> 763
aaggatggga ctgggtaagg 20

<210> 764
<211> 483
<212> DNA
<213> *Oreochromis niloticus*

<220>
<221> misc_feature
<222> 35
<223> n = A,T,C or G

<400> 764
ggcatagaaa atgtggacag acagagtgtt gttnttccac ggagctggag aagtgttaaca 60
atcataaaga gtgtgcagtt cataaaagca cagtgcagag aatcgccttt catagagttt 120
ggtagacaaa aaaatatgtg aacgaataaa aatattagt taatacaact taagagacac 180
cttagttagt ggttggatgc ctatgatgtg tatacattat atatacttta acaccatccc 240
tcaccaccac caccaccaca cacacacaca cacacacaac aaaataaaaat aaaaaaacag 300
aaaaagatat ttttaactag ctaacagcct tagagtatcc ccaagctgaa cacagaggct 360
acttcgtcct gtatgtgttt tcctggaacc aaaataataa aaaaggagga agtgattcat 420
gctgaataag acaaatggca aagcagctac tgtgcatcac tatttcactg gtcagttcct 480
gct 483

<210> 765
<211> 20
<212> DNA

<213> Oreochromis niloticus

<400> 765

ggttggatgc ctatgatgtg 20

<210> 766

<211> 20

<212> DNA

<213> Oreochromis niloticus

<400> 766

agcctctgtg ttcagcttgg 20

<210> 767

<211> 360

<212> DNA

<213> Oreochromis niloticus

<400> 767

acttggacaa caatgggatg aaatgctggt gttgttttaa gtttacagag catttgtgtgt 60
gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt acagtgggtt ggctggagga gagagaagaa 120
gcaggggggtg taaagaagtg agtcaggaaa tggtgaaatg tgaggagatg gaagacttga 180
gggggggacag aaaaagaaaag aggagcgcat actgtaaaca gaaacgtgtc agggctgatc 240
ttcatcagca gatccactc tgactgagga cttcaggtga ttgtctcaga ggaaaccctt 300
catgcagtct gattgaggag ttgcataatt aggcttgagg gtttctttaa agatgaatta 360

<210> 768

<211> 20

<212> DNA

<213> Oreochromis niloticus

<400> 768

ttggacaaca atgggatgaa 20

<210> 769

<211> 20

<212> DNA

<213> Oreochromis niloticus

<400> 769

aagatcagcc ctgacacgtt 20

<210> 770

<211> 654

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 3, 16, 26, 457, 469, 522, 526, 529, 542, 546, 561, 577,
587, 592, 593, 596, 602, 630, 638, 642, 651, 653

<223> n = A,T,C or G

<400> 770

ttngtttgac aaccgntggg taccgngccc ccctcgagg tcgacggtat cgataagctt 60
gatatcgaat tcctgcagcc cactcaatga attaaatctg agctactttc aatgtatcat 120

```

tgaatctgaa taatctttat tatcactata cacacagagc aatgcaacat cacaaaaccg 180
gtttcttggg gtttttccttt tttttaactt ctttctcgta acagtgtgta tatgtgtgtg 240
tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgctgtg tgctgtgtgca ttacacagga 300
aatgtctgga aagggtcatag catccagtga aaattctagg ggaacgaggc agcacagagg 360
ttacactgtc acctcacagc atgaagttcc tgattcaaaa cccagctggg aactttccat 420
gttcttctcg tgggggatcc actagttcta gagcggncgc caccgcgng gagctccaat 480
tcgccctata gtgagtcgta ttacgcgcgc tctactggccc gngcgnntna acaaccttcg 540
tngacntggg gaaaaacccc ngggcgggtt ccccccnaacc ttaaaanccc cnnttngcag 600
cnaaaattcc cccctttttt cccccagtn ttggcgtnta tnaaccaaaa nang 654

```

<210> 771

<211> 19

<212> DNA

<213> *Oreochromis niloticus*

<400> 771

ccggtttctt ggagttttc 19

<210> 772

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 772

cccctagaat tttcactgga t 21

<210> 773

<211> 673

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 7, 29, 30, 83, 86, 182, 200, 373, 374, 423, 478, 502, 539,
547, 585, 594, 596, 605, 634, 637, 654, 666

<223> n = A,T,C or G

<400> 773

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tttaaanccc ttggaccgtc cccaccctnn aggtcgacgg tatcgataag cttgatatcg 60
aatccttgca gcccactgat gtnttntttt tctatactgt tgattaacta tggtgaccct 120
ttgaggttgg ggacacctgg aataacttga attattcctt atcattgata atgcttcaag 180
tncacgggtt actgaagagn gggaaatcta acagcataca tcagggtgaaa gtcacacaac 240
cttgagtcaa aaaaacattc actgcttgaa aagttaaaga gtctgtttca cagtaggacc 300
atggacagga caaaagcact acacatcact gcacacgcac acacacacac acacacacac 360
acacacggag canngtaaaa ggaaactaac tacatgtggg ggatccacta gttctagagc 420
ggncgcacc gcggtggagc tccaattcgc cctatagtga gtcgtattac gcgcgctnac 480
tggccgtcgt tttacaacgt cntgactggg aaaaccctgg cgttacccaa cttaatcgnc 540
ttgcagnaca tccccctttc gccagcttgg gcgtaatagc cgaanaggcc ccgnancgat 600
tcggnctttc caaacagttg cgccacctgg atgnccnatg ggaattgtaa gccntaatat 660
ttttgntaaa ttc 673

```

<210> 774

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 774

agtttccttt tacactgctc c 21

<210> 775

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 775

cagcatacat caggtgaaag t 21

<210> 776

<211> 602

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 3, 4, 6, 7, 9, 11, 12, 17, 21, 26, 29, 32, 35, 36, 39, 56,
62, 583, 593, 595, 596, 602

<223> n = A,T,C or G

<400> 776

```

ggnnngnnngna nnttatntct nctagnaant tnagnnatnc tcccccttt tgaggncgac 60
cntatcgata agcttgatat cgaattcctg cagcccacat taacagaaca ggacacacaa 120
gggtgcagga tcttttcac tccacattat cagtgagatt actaatgaga gcagttgtat 180
gtgcttataa caccatcact ttcagcctat tgagccttgt gagcacacag ccagttctct 240
gcaactgtgg gagttatcaa agtgtgtgtg tgtgtgtgtg tgtgtgtgtg taattagtgt 300
tgaggaagag ggatagtggg gttaaactaa acactatgga gaaccatgac atctgggaga 360
aaggatgagg gaaggctttt ctctctgcac agtcatgcac agaaacagag acttggctct 420
tattctttgc ccctttcttt cccatttcat caccttttta gagctatagt gcacagaggg 480
tggagaggac ccctctgctg ggacaaaagg catctcatct taaggatgag ggggggtggaa 540
tgaatatgca ttggaaatgg gggggaattg aaatggaaat acngggaagt aantnnccat 600
gn 602

```

<210> 777

<211> 20

<212> DNA

<213> Oreochromis niloticus

<400> 777

gcctattgag ccttgtgaga 20

<210> 778

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 778

gtttaacccc actatccctt c 21

<210> 779

<211> 634

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 4, 6, 10, 11, 22, 23, 31, 54

<223> n = A,T,C or G

<400> 779

```

ttgntntccn ntgtgatctt cnntggaaac nccccccccc tttcgaggtc gacngtatcg 60
ataagcttga tatcgaaattc ctgcagcccc ctctgggaag tttctccgca ttcctgcaat 120
agattcagac atacacacct aaaaattaat agacaggaag ctggaaggaa cctgaagctg 180
aggctgggta agtgtgtgca ggctgagagt gtgctgctct ttttcacaac agctcatcag 240
ttgttgctt catgtccact gttgtgtgtg tgtgtgtgtg tgtgctgaaa caggagtttg 300
gaggggctac tgctgtagga ctggagacca gaacctcatc atccccgccc tgccagggtg 360
tgtattttcc tgactcatcc tctgtttcat cgctgaatgc ttctctgtca ctttccccgc 420
ctgcacaaac ataactcagt cacaggaagt gctctaccgc tttcagttac gtcctcacta 480
aagcgtatct cttggtcatt gtgtcttcaa gtgcagatac agtgaaaaca gaggaagcta 540
tttttcttta agtgttgtta gagctgaaat aaccacagct tccaccaag aaaatgcagc 600
atttgtaggg aagggttcgta ttttaaagtg ttca 634

```

<210> 780

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 780

```

ctcatcagtt gttgccttca t 21

```

<210> 781

<211> 19

<212> DNA

<213> *Oreochromis niloticus*

<400> 781

```

cggtagagca cttcctgtg 19

```

<210> 782

<211> 660

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 30, 564, 596, 612, 617, 627, 640, 642, 643, 644, 645

<223> n = A,T,C or G

<400> 782

```

tttgaaaccc ttggaccggc cccccctcn aggtcgacgg tatcgataag cttgatatcg 60
aatcctgca gccacacac aacaagggat tttctgaggt ttgaattcaa ttgtaaacag 120
taaaacaagc ttcacaggat cataaggagc aacataacag aaggagcagg tgtgcataaa 180
acacaaagga tcactctcac catgttccca ctgtggaggc ttgctttctt aatgatataa 240
taatataatca ttaagaatgc atatataat atatacatat atatgtgtgt gtgtgtgtgt 300
gtgtgtgtgt gtgtgtgtgt agagagagag agagagagat gcatttaata catatcttaa 360
tataggaaaa ggaagtgaata tttcaagagc acatctgagt ttttccacat gataaagaaa 420
tctttcagcg tgacttgggc ttaaagtcta agaaataaat gtgtaaaatt acagaaaaaa 480
ttctggtagc tcattgtctc atggtcctgt aattttctgt taatttagaa aatggggggg 540
atccactagt tctagagcgg ccgncaccgc ggtggagctc aattcgcccc tatagnagat 600
ccgtattacg cncgctnact ggcccgnctg tttacaaccn tnnnngactg ggaaaacccc 660

```

<210> 783

<211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 783
 gcaacataac agaaggagca g 21

<210> 784
 <211> 18
 <212> DNA
 <213> Oreochromis niloticus

<400> 784
 cccaagtcac gctgaaag 18

<210> 785
 <211> 232
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 85
 <223> n = A,T,C or G

<400> 785
 cctcctacaa tcctaataccc tgtaattac acttcctgcc caccacagac ctgaataata 60
 acccaccgct ccttatcaat atggnagcac tggctgctat tacactttct gctctgcatg 120
 atactacccc acattgtagt ccacacacac acgcacacac tcacacacac acacacacac 180
 acacacacac acacactttt tttgttggat gaccaattcc aaaaaacaca gg 232

<210> 786
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 786
 attacacttc ctgcccacca 20

<210> 787
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 787
 ttggaattgg tcatccaaca 20

<210> 788
 <211> 628
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 2, 4, 5, 7, 9, 10, 13, 14, 17, 26, 29, 30, 44, 45, 47, 55,

61, 62, 64, 70, 302, 386, 447, 486, 516, 517, 518, 523, 551, 561, 563,
565, 585, 586, 587, 588, 595, 599, 607, 608, 610, 611, 613, 616, 617, 618, 619,
620, 621, 628

<223> n = A,T,C or G

<400> 788

```
gngnntngnn gannttntat tggatnatnn aagatcttta atgnntnact ccgngnggttc 60
nncnctagan ctagtggatc cccccctgag cccttgaggc aatttgact aaaaccctga 120
aagagtggat atgcctatca tgataatctt gaatgtgggg cacctggaac tgttggctgt 180
gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gttaggggtg 240
tggttttcca gtatgtttag cctttgggtc cagctggaaa gcattaaaaa aatctgacct 300
tncattgcac ttactttgaa atttggctct ctatctgtgt caagttaaaa taaaagcttg 360
gcaataaaatt gtctcagaca cttcanaagt aaatgtatgc agactgatgt tttgacatgc 420
aaatccccct attgtcccca atgttgngtc aaagcccttt taacttataa gacctggggg 480
ctgcangaat tcgatataca gcttatcgaa acccgnnnac ctnaaggggg gccccgttac 540
ccaacttttg ntcccttttaa ngnanggggt aaattgcccc ccttnnnnta aacantggnc 600
aaaaaanntn ntncnnnnnn naaaaaan 628
```

<210> 789

<211> 17

<212> DNA

<213> *Oreochromis niloticus*

<400> 789

```
tggggcacct ggaactg 17
```

<210> 790

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 790

```
gctggaacca aaggctaaac a 21
```

<210> 791

<211> 592

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 3, 8, 9, 11, 18, 30, 43, 520, 545, 546, 553, 559, 560, 566,
577, 580, 584, 592

<223> n = A,T,C or G

<400> 791

```
ttnttttntt ncctcggnntt gcccttcgtn taccggcccc ccnctcgagg tcgacgggtat 60
cgataagctt gatatacaat tcctgcagcc cccactctaa ctcaattatt gcatcttagc 120
tagtgtccca gtgaaacagt gattaatatt catgcagatt aaccaggaaa caattgtgtg 180
tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtctgtg tgtgtctgtg 240
tgtgtgtaat tcataggcat tttgagagt tatagggact agctcacatt tggagccagc 300
ctcaagtgtc gatattgaaga tcttctgttt gtggcagttg cacatcgact ttaattttca 360
ccactggagt cgcttgacct aatgcagaag tgcttttgat ctgcctttct aatgactggc 420
agtaggtgaa tccttttttt ttttttattt tgtaacaaa ctcaaattgc atagaagtct 480
atgtaaaaac aaccgttctt tggctctact agttttatgn tataacccaa ataatggtca 540
tttanntaag ttntgatcnn aaaagnacat aagatanttn gggnttttta an 592
```

<210> 792
 <211> 19
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 792
 agctagtgtc ccagtgtgaa 19

<210> 793
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 793
 attagaaagg cagatcaaaa g 21

<210> 794
 <211> 806
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 3, 4, 5, 12, 13, 14, 17, 30, 39, 463, 515, 532, 548, 616,
 642, 649, 650, 658, 663, 665, 680, 694, 712, 725, 730, 733, 748, 749,
 752, 757, 761, 768, 771, 774, 775, 782, 785, 788, 804, 806
 <223> n = A,T,C or G

<400> 794
 tgnnnntttga annnctntga atggcccttn ccgcggtgnc ggccgctcta gaactagtgg 60
 atccccccaca tgtagttagt ttccttttac actgctccgt gtgtgtgtgt gtgtgtgtgt 120
 gtgtgtgctgt gtgcagtgat gtgtagtgt tttgtcctgt ccatggtcct actgtgaaac 180
 agactcttta acttttcaag cagtgaatgt ttttttgact caagggtgtg tgactttcac 240
 ctgatgtatg ctgttagatt tcccactctt cagtaaccgc tggacttgaa gcattatcaa 300
 tgataaggaa taattcaagt tattccaggt gtccccaacc tcaaagggtc actatagtta 360
 atcaacagta tagaaaaaaa acacatcagt gggctgcagg aattcgatat caagcttata 420
 gataccgtcg acctcgaggg ggggcccggg acccagcttt tgntcccttt agtgagggtt 480
 aattgcgcgc ttggcgtaat catggtcata gctgnttcct gtgtgaaaat gntatccgct 540
 cacaattnca cacacatacg aaccggaagc ataaagtgtg aaacctgggg tgcctaaaga 600
 gggagctaac tcacantaaa tgccgttgcg ctactggcc cnttttcann cgggaaanct 660
 gtngngccac tgcattaatn aatcggccaa cgcncggga aaagccgttg cntatttggg 720
 cgctnttccn ttnccttggt atgactcnnt tngcttnggc ngttcggntt nggnaaccg 780
 gnatnagntt actcaaaggg gggnan 806

<210> 795
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 795
 agtttccttt tacactgctc c 21

<210> 796
 <211> 18
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 796

tccacgggtt actgaaga

18

<210> 797

<211> 595

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 2, 3, 4, 5, 8, 12, 40, 87, 317, 320, 336, 341, 350, 355,
 383, 401, 461, 488, 493, 495, 499, 512, 517, 526, 534, 540, 542, 545,
 546, 554, 563, 565, 570, 574, 578, 584, 590, 591, 592, 594

<223> n = A,T,C or G

<400> 797

tnnnnctnctg tnacccctttt ggaatacccc gcccttctn gaggtcgacg gtatcgataa 60
 gcttgatatac gaattcctgc agcccnatg accacagcgt gtggatgaat tacctctaaa 120
 tattgcggtc tatccctctg taagtgcacac tgggtgtaga ttgcaaaactg acagtcagct 180
 gccataacta aagagattttt ctaaataatct gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt 240
 gtgtgtgtgt gtgtgtgtgt tctcgtgtgt gtgtgtgtgt gtgtggctgc tgagctggag 300
 tgattatggg gtttagntgn ccgtttgcgt ggctgnggtg ntgacacacn ttgtntacta 360
 tgtgatgttc ccgttttaggc agngtggtaa aagcgaggta ncaagaaatt ccttgtctga 420
 catttaatgg actgtaacct actctatttg accgctcaca ngttattgaa tctctgtctt 480
 aaacatangt tantngggng gatccaccta tntctanaag cggccnccac ctngtggan 540
 cncnntccc cctntagtga gtngnatacn ccngctnac ttgnccctn nntnc 595

<210> 798

<211> 18

<212> DNA

<213> Oreochromis niloticus

<400> 798

gcggcttatc cctctgta

18

<210> 799

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 799

taaaccat aatcactcca g

21

<210> 800

<211> 653

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 2, 5, 7, 12, 13, 21, 23, 24, 25, 27, 30, 33, 35, 37, 41,
 45, 61, 69, 86, 135, 194, 195, 270, 292, 320, 330, 360, 388, 391, 395,
 405, 416, 424, 431, 455, 463, 470, 480, 490, 497, 505, 506, 507, 509, 512, 513,
 517, 519, 536, 542, 555

<223> n = A,T,C or G

<221> misc_feature

<222> 559, 566, 570, 572, 574, 577, 578, 585, 586, 588, 600, 606,
615, 618, 624, 631, 639, 642, 650

<223> n = A,T,C or G

<400> 800

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gnagnngntgt gnnacttatt ntnnnanaaa aantnanact naagnctcgc ggagtttggc 60
natctaccnc tagtggatcc cccccngcct tggatctgag taaacaaatg ccaatgttgc 120
acaaacacac acagncacac acacacacac acacacacac acacacacac acacacacac 180
acacacacac acannaaatc tgcattttatt tgtcccacaa gtggaaactc tgcattgtca 240
ttgcaaaaaa gtggacagag cacggtatan aaagtgcact atacaaacaa tntggaaaca 300
tatatatgga catgagtatn caaaaatatn ggtgtatgta tacacacaca cacacatatn 360
tatctatcta tctatctatc tatctatntg ngagnataac tagantttat gcatantata 420
taanggggtgg ntatataaat atataaatat atganggctg tangaattcn atataaacn 480
tatagatacn ggggagntcc agggnnnanc tnntgcncnc tttagtgatg gttaantgag 540
cngctaacga aatcntggnc ataattngggn gncntgnnta aaaannntnta ttcggattan 600
caattncaca caaanatncc aagncggaat nttaaaagng tnaaaccttn ggg 653
```

<210> 801

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 801

```
cggcacatac atctactacc t 21
```

<210> 802

<211> 17

<212> DNA

<213> *Oreochromis niloticus*

<400> 802

```
tcaccatcaa cgctgaa 17
```

<210> 803

<211> 118

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 73

<223> n = A,T,C or G

<400> 803

```
gagagaacaa gaggcaggtt agcaccacgg acccacacac acacacacac acacacacac 60
acacacacac agngttttca tgtttggtgg gacatctcat tggcataatg ctttccct 118
```

<210> 804

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 804

```
aagaggcagg ttagcaccac 20
```

<210> 805

<211> 20

<212> DNA
 <213> Oreochromis niloticus

<400> 805
 aggggaaagca ttatgccaat 20

<210> 806
 <211> 584
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 1, 2, 5, 6, 10, 14, 16, 88, 568
 <223> n = A,T,C or G

<400> 806
 nnttnnttgn agtnanctct ttggataccc ggccccctct cgaggctcgac ggtatcgata 60
 agcttgatat cgaattcctg cagccccntc gaggctcggga aacctttact tcattataca 120
 cgctccttaga tgtgttcatt ttagacacac tgcattgtgg gattacgtgg tgatcagggtg 180
 gagctcgaaa caaggaaaaa gatgttattt tgcttaaatac tgagaaaaaa tgcattggacc 240
 ttgggttggga attatctccc agattgttct tgtttctttc ttggctctgc ttgcacacac 300
 acacacacac acacacacac acacacacac acacacacac acacacacac aggaagtatc 360
 acatgtctgg gtgataaatg tcaccctga ggtgtctggc agacgtatat ctgataatat 420
 ttaattgacg tatagagtgc atgtctccac aactgcaggg ggggatccac tagttctaga 480
 gcggccgcca ccgcggtgga gctccaattc gccctatagt gagtcgtatt acgcgcgctc 540
 actggcccgct cgttttacaa cggtcgtnga ctgggaaaac cctg 584

<210> 807
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 807
 cttgtttctt tcttggtctt 20

<210> 808
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 808
 ctcaggggtg acatttatca 20

<210> 809
 <211> 609
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 2, 3, 4, 5, 7, 8, 9, 10, 11, 13, 14, 17, 18, 19, 22, 23,
 24, 27, 30, 32, 39, 41, 45, 87, 106, 538, 564, 565, 566, 582, 586, 605
 <223> n = A,T,C or G

<400> 809
 gnnnnngnnnn ntnnttnnt tnnnttnagn anatttaang naacnctgc ctattttgga 60

```

aaaccgaccc gtatcgataa gcttganatc gaattcctgc agcccntttg gcagagacac 120
cagcaccagt gggggggtgt tcctcaagct gcccatgccca cccaaacaca cacacacaca 180
cacacacaca ccctcctctc acttttctcatt tctctacatc tgtttttccc ccaaattttac 240
ttcaaataag agcaaacgcc ggctctggaa cgcctcctat aaatccgagg agcgttacga 300
agacggggtt taggggtctg agttaaataa actggctgtc taatcatctg cacaacaata 360
tttgctgtga ggcattctaa atagattatc gctagtccat ctgtgtcatc attgatttat 420
aaggcattaa gctgctcggg gaagagatag ggggggggga tccactagtt ctagagcggc 480
cgccaccggc ggtggagctc caattcgccc tatagtgagg tccgtattac gcgcgctnac 540
tggccccgtc gttttacaac ggtnnnggac tgggaaaacc cngggngggt acccaactta 600
atcgncttg 609

```

<210> 810

<211> 19

<212> DNA

<213> *Oreochromis niloticus*

<400> 810

gcagagacac cagcaccag 19

<210> 811

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 811

ttataggagg cgttccagag c 21

<210> 812

<211> 814

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 9, 11, 13, 53, 137, 428, 535, 565, 583, 584, 596, 597, 615,
626, 630, 670, 671, 681, 690, 698, 701, 704, 706, 732, 742, 760, 774,
779, 784, 787, 792, 804, 805, 806, 813

<223> n = A,T,C or G

<400> 812

```

ttggttgtna nanccctttg gaaagccccc cctcgagggtc gacggtatcg atnagcttga 60
tatcgaattc ctgcagcccc cgagcggttg atggcgggga tctcagagta gacgtcagag 120
gattctgggt aattttncac caccagggtta cagggtgtgat gaagcagaga ctgacgggtg 180
accgtgtcct tcacctccac cactttctcc aggttaactca gctcaaagcc tttagcctgc 240
gcacacacac acacacacac acacacacac acacacacac acacacacac acacacacac 300
acacacacac acacacacac acacactcac tcagaggacg acgttcgatc tccgcctgaa 360
atctctaatac ttgactcctt atttagagga ataacaaact gggggggatc cactagtctc 420
agagcggnccg ccaccgcggt ggagctccaa ttgcgcctat agtgagtcgt attacgcgcg 480
ctcactggcc gtcgttttac aacgtcgtga ctgggaaaac cctggcggtta cccancttaa 540
tcgccttgca gcacattccc ctttngccag ctgggcgtaa atnncgaaga aggccnncac 600
cggatcgccc tttcnaacag tttgcncacn ctgaatggcg aatgggaaat tgtaagccgt 660
taatattttt ntaaaaaattc ncgttttaan ttttttgnta naancngctt cattttttta 720
cccattaggc cnaaaatcgg gnaaaatccc tttataaatn aaaaaggaat aganccgana 780
taanggnntg angtggttg ttcnnntttg gang 814

```

<210> 813

<211> 21

<212> DNA
 <213> *Oreochromis niloticus*

<400> 813
 ccttcacctc caccactttc t 21

<210> 814
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 814
 agatcgaacg tcgtcctctg 20

<210> 815
 <211> 608
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 2, 9, 13, 15, 21, 39, 43, 91, 115, 551, 562, 569, 590, 596,
 601, 603, 607
 <223> n = A,T,C or G

<400> 815
 tntatattgnc tcncngaact ncttggaac cccgccccnt ttngaggctcg accgtatcga 60
 taagcttgat atcgaattcc tgcagcccac ncttgccat tcaggctctt ctttngctgt 120
 aacaccacca accccctcac actgacacac acacacacac acacacactc ccttcctcgc 180
 tatctggcag tcttggtgcc tggagggagt tcattctgcc ctccttctct cctcctctcc 240
 tccacctctt tccttggtga tcggcagtga gagcgagaga gagagagaga gagagagggg 300
 aggggtgagaa aatgagagag cgagagagag agtggcagca gtagcggagg aagcagagct 360
 gtctctcttc tgatcatctt tcttgatag agggataaaa ggcagtccta ggaatcagtc 420
 gttgctcttg tctgcaggat ttaccagcc tgagtttatt ctccctcctt cctcttttca 480
 cctcttcttg aactggacc gctagctttt acatctctct ctccgggggg ggatccacta 540
 gttctagagc ngccgccacc gnggggggng ctccaattcg cctatagggn gtccgnatta 600
 ncncncnc 608

<210> 816
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 816
 tattcaggct cttcttttgc t 21

<210> 817
 <211> 19
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 817
 cagaatgaac tccctccag 19

<210> 818
 <211> 537
 <212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 2, 3, 4, 5, 6, 7, 9, 10, 12, 26, 34, 36, 38, 43, 55, 356,
366, 406, 427, 458, 464, 465, 467, 475, 479, 481, 497, 498, 501, 507,
509, 517, 518, 519, 520, 526, 528, 529, 530, 533, 536

<223> n = A,T,C or G

<400> 818

```

gnnnnnnnngnn angtatattg ttatangaga tcanangnat acnccccggt tttgngaaat 60
agacctagtg gatccccccc aagctggtgt caggctgtgt gttaatactg aagcctgtct 120
gcccttagga agaattggata aggaataaaag gcagacacat attactctgc gtgtgtgtgt 180
gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgaga 240
gagagacaga gtgtgtgtcc tgtgcactgc agttcctgat ttacattaaa tgatcatcac 300
ccgagcagag agaagttcta gcacatttta agccctcgac cgcaccctgt tctcantaaa 360
tgctncttt actgtcaggt ctgctcctac ataccaaata gagcanagag atgaaggggg 420
gctgcangaa ttcgatatca agcttatcga taccganca cctnnanggg gggcncccng 480
nacccaaatt ttttggnncc nttaangna aaggggnnn aaattngnnn ccncnt 537

```

<210> 819

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 819

```

taaggaataa aggcagacac a 21

```

<210> 820

<211> 18

<212> DNA

<213> Oreochromis niloticus

<400> 820

```

ggtcgagggc ttaaaatg 18

```

<210> 821

<211> 574

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 4, 14, 19

<223> n = A,T,C or G

<400> 821

```

gatnccctttg aatnccccng gtggcgggccg ctctagaact agtggatccc ccacagccag 60
gaccgatgtg aacttttgcaa ttcactttga caatgtgtat gaaattctga aattaagaaa 120
tatgattttt cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca 180
cacaaagaaa aaaaaacgta atttatgttt gaaaccagga actttttttt aatgactggg 240
aaaaatactt gtggaaacct gtaaagttct gtaactgtat ctcgtgtagc tgcaacacca 300
tcatgtggac aaatctgcca aagttcttga acatgctttt tgtgctagtt ctcaacattt 360
tagatgtctg actgtgggct gcaggaattc gatatcaagc ttatcgatac cgtcgacctc 420
gagggggggc ccggtaccca gcttttggtc ccttttagtga ggggttaattg cgcgcttggc 480
gtaatcatgg tcatagctgt ttcctgtgtg aaattgttat ccgctcaciaa ttcacacaac 540
atacgagccc ggaagcataa agtgtaaagc ctgg 574

```

<210> 822
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 822
 ccaggaccga tgtgaacttt g 21

<210> 823
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 823
 tgggtgttgca gctacacgag a 21

<210> 824
 <211> 267
 <212> DNA
 <213> Oreochromis niloticus

<400> 824
 accagtgata aaatgttatt ttccaaagag acaagtaagc caaattaatg ataattttatt 60
 tataaaacat ctctaagggtg gaagtcattgt tagaagaaaag gaatggagca ctgcttcagt 120
 gtaataactga gtgtgaatgt gcgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt 180
 gtgtgtgtgt gtatgcacag catgagtcac ccagcctgcc tgtgattgga tggtagttta 240
 tgggtgaggg aggagaaaga gaggcctt 267

<210> 825
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 825
 taaggtggaa gtcattgttag a 21

<210> 826
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 826
 ctcacccata aactaccatc 20

<210> 827
 <211> 669
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 2, 3, 4, 5, 6, 7, 8, 14, 16, 20, 22, 28, 33, 52, 53, 54,
 64, 465, 479, 496, 508, 518, 520, 521, 526, 539, 543, 547, 555, 559, 561,
 563, 564, 565, 569, 575, 580, 581, 582, 584, 585, 587, 589, 595, 596, 597, 598,
 599, 600, 603, 611
 <223> n = A,T,C or G

<221> misc_feature

<222> 614, 615, 616, 617, 618, 619, 620, 624, 625, 626, 627, 628,
629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 647,
650, 651, 653, 657, 658, 659, 660, 667

<223> n = A,T,C or G

<400> 827

```

gnnnnnnnnag ggtntnttgn tnttgggnta aanggaatgc tcgccgggttc tnnnctagac 60
ctantggatc ccccatctgt gttttaacca tagattatac aacacacata tacgcacaca 120
cacacacaca cacacacaca cacacacaca cacacacaca tatatatgta tatatatct 180
tattagcgcc aaagttgagc attttaacaa tggagtgcac gaggattgac taaactgcag 240
tttttgacat gatggttgat gaatctggac atgttatggt taaatgttcc attccctaca 300
ctttataagc agaatgtaag gagagatgag gtctgagttt ttaaccaaac ctttgaaaaa 360
tgcatgtgct atatttactg cttcagtttt aggcgataag tcagagatgg tgctcttgaa 420
tttatggggg taaggaataa ccaacatggt tgggtgcaccc gggtnnggtca aaccttttnt 480
tttgaaaact gggcanccaa tttttttnaa agggcccngn naaaanttgc cccaagggna 540
aantttnggg gttcnaaang ngnnntttng ctccncccan nngnngngna aaaannnnnn 600
tgnaaaaaaa nggnnnnnnn aaannnnnnn nnnnnnnnnn naaaaaanaa ncntttnnnn 660
gggggggnc 669

```

<210> 828

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 828

```

catctgtgtt ttaaccatag a 21

```

<210> 829

<211> 18

<212> DNA

<213> *Oreochromis niloticus*

<400> 829

```

ttggcgctaa taagaata 18

```

<210> 830

<211> 192

<212> DNA

<213> *Oreochromis niloticus*

<400> 830

```

tgggtgtccca agaaaaccag gacaccgcca cacacacaca cacacacaca cacacacaca 60
cacacacaca cacacacaca caaacctaaa agggaaacaa gggacacaag cacaatgcat 120
aaccctggct ggggactgcc agcacaagat aaccccagaa aatgtttatc aagcacatga 180
gtcctgggtc cc 192

```

<210> 831

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 831

```

gtgtcccaag aaaaccagga 20

```

<210> 832

<211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 832
 gacccaggac tcatgtgctt 20

<210> 833
 <211> 614
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 3, 7, 9, 24, 27, 46, 52, 85, 461, 577, 591, 610, 612
 <223> n = A,T,C or G

<400> 833
 ctntgantnc tttggccttt ccanacncct ttcgggggttt tggagnccga cngtatcgat 60
 aagcttgata tcgaattcct gcagnccctt tttctccccg agagactgca cacaacatta 120
 aagcctagtg ttgtgtgtaa atgtgggttg cacaaatcac atccctgtgc cagaatccat 180
 acgtccagtc aagcacagtc agaacgaaca cacacacaca cacacacaca cacacacaca 240
 cacacacaca cacacactcc cagacaatgc tctctgtcat cctacctcag ggctccatct 300
 ctcatattacc ctgtttgccca tggcaacatg gtttggggggg gggatccact agttctagag 360
 cggccgccac cgcggtggag ctccaattcg ccctatagtg agtcgtatta cgcgcgctca 420
 ctggccggtc gttttacaac gtcgtgactg ggaaaaccct nggcgttacc caacttaatc 480
 gccttgcagc acatccccct ttcgccagct ggcgtaatag ccgaagaggc ccgcaccgat 540
 cggcctttcc aaacaagttg cgcaacctgg aatggcnaat gggaaattgt naagcgtaa 600
 ttatttttgn tnaa 614

<210> 834
 <211> 18
 <212> DNA
 <213> Oreochromis niloticus

<400> 834
 ccctgtgccca gaatccat 18

<210> 835
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 835
 ggcaaacagg gtaaagaga g 21

<210> 836
 <211> 603
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 7
 <223> n = A,T,C or G

<400> 836

```

ctttganacc gttgggtacc gcgccccccc tcgaggtcga cggtatcgat aagcttgata 60
tcgaattcct gcagccccca gcttacctcc ccattgactg gagctgagag acattttcaa 120
aagttaaaag acagagaagg aaatgcaggg tcaccgggct gaggagggtc gctcccccc 180
aacgctacac aggaaacggg gttagaaaca catttagcca taaatgacag gtaaccactt 240
cctgatcccc cccttgacat ccacaacagc tcccgtaaagt gttgactgac agcatcccc 300
tttattccat ttttctgctc ataacaaggc agtgattgat gactgtttgt cctcgtgtgc 360
catttttctg tatattcaca ttttagccaa cacacacaca cacacgcaca cacacacaca 420
cacacacaca cacacacaca cagctctggc tcatttacag ggcattctgtg aagggttгаа 480
cctcctctta gcaagtcaag tgagatcatt ctccctaccac ccctccctct tgcctacca 540
catacaaaaa atacacacat gcacacacgc acagttttgc tcaacccatc aaaaagagtc 600
gca 603

```

<210> 837

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 837

atcccccttt attccatttt t 21

<210> 838

<211> 18

<212> DNA

<213> *Oreochromis niloticus*

<400> 838

ggaggggtgg taggagaa 18

<210> 839

<211> 550

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 3, 4, 5, 7, 8, 10, 12, 21, 23, 25, 26, 27, 30, 32, 35, 37,
38, 42, 46, 53, 54, 121, 513

<223> n = A,T,C or G

<400> 839

```

ggnnngnngn anttattttt ntnannnatn tnaancnnag cncncncgtt ggnngccgct 60
ctagaactag tggatcccc aaacaccta atgcattatc actattaata aatgcgtcaa 120
ngcagatgct tggtatatga ttatgatgca atagcaataa caaaataatg aaactagaaa 180
tagtaaaatg aaataataaa aatggcgaaa aaataacacc tcaattcctc acactttcta 240
aatccatgct cagttgactg aattaatacc tttatgccag gtggattgca gtcaagttgc 300
agatgatctg attgcatctg acagatgatc catgaaaacg atgcacctga gatcagtttt 360
aagtgtcatt gcaaaatgtg tctatacaca cacacacaca cacacacaca cacacacaca 420
cacacacaca cacacacaca cacacacaca cacacgggtg ctaggctaga cccctcatgc 480
taaccaagcc taccacagcc atgagcgaca ganataaata tgaagacata ccggcttgga 540
catcgtctgg 550

```

<210> 840

<211> 19

<212> DNA

<213> *Oreochromis niloticus*

<400> 840

catgaaaacg atgcacctg 19

<210> 841
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 841
 tagcatgagg ggtctagcct a 21

<210> 842
 <211> 632
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 2, 3, 4, 5, 6, 7, 9, 10, 12, 13, 15, 17, 21, 22, 24, 26,
 45, 51, 54, 492, 524, 538, 557, 598, 618
 <223> n = A,T,C or G

<400> 842
 gnnnnnnngnn anntntntttg nncnanggga gtttgatgca cttcncggtg nctnccgctc 60
 tagaactagt ggatccccca tcgcaggagg ctttaccaca tgtttagatc tgaacagtgc 120
 actgtgagat caaacacaca ccagggtgctc tcatgtaatc acatctgttt caaatgtagt 180
 ctgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtccagga caccatgttc aagagcatca 240
 tatcgtatgt cactacatca acacataatt agacacagat cttagtcgcc ctgaagagtc 300
 ggggtgacag agacgcaact tgacaaaaat caccactca cactctcagt gcagaacatg 360
 atattagaag cagccctgct gtcacactgc tgggagttgt agatgagaca agctaagatg 420
 atggaagggtg ggtttacatg catctcctca tgccagtagc ttctctgggt tcttgcagag 480
 ggtttgcagc angcttcttt ggaagttttc ttcaggtatt tcangaacca ggaactcngc 540
 agtagatcaa atttgcngta aacaattaaa cataactgca cagggtggctg gaccccantg 600
 gatgctgcac atactgtnaa actctacttt tt 632

<210> 843
 <211> 19
 <212> DNA
 <213> Oreochromis niloticus

<400> 843
 cgcaggaggc tttaccaca 19

<210> 844
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 844
 tcaagttgcg tctctgtcac c 21

<210> 845
 <211> 611
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature

<222> 2, 4, 24, 25, 30, 39, 58, 98, 516, 540, 604, 611

<223> n = A,T,C or G

<400> 845

```
tntntctttt gataagtaga tccnnttggn accgccctng cggttcgctc tagaactngt 60
ggatcccca aagcagctta aagcaacacg ggctcgngt cagagcataa ctagtgtcat 120
aaaattcaag taactgctaa ttgctgctct ctatacaaaa gtggattcag ttaacagcca 180
caactgaaaa actgaaatag cgtccaggaa aatgaaaaat ctcactaaac tcactcttta 240
tatttcaatt tattttctca tagtcgggaa gacatgctgt aatacgcaca cacacacaca 300
cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca cgtatagaat 360
ttcctgtcat gttgcccaat tcaactgctt tgggctgcag gaattcgata tcaagcttat 420
cgataccgtc gacctcgagg gggggcccg taccagctt ttgttccctt tagtgagggt 480
taattgcgcg cttggcgtaa tcatgggcat agctgnttcc tgtgtgaaat tggatatccgn 540
tcacaatttc acacaacata cgagccggaa gcataaagtg taagcctggg gtgcctaagt 600
agtnagagcta n 611
```

<210> 846

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 846

```
gccacaactg aaaaactgaa a 21
```

<210> 847

<211> 18

<212> DNA

<213> *Oreochromis niloticus*

<400> 847

```
gggcaacatg acaggaaa 18
```

<210> 848

<211> 593

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 10, 11, 39, 114

<223> n = A,T,C or G

<400> 848

```
ttttgactcn nagccctttg gaatacccg ccccttctng aggtcgacgg tatcgataag 60
cttgatatcg aattcctgca gccatttta tatcaagatc taaagtatca catntagtg 120
aattttcatt aactcaccag aataaaca aaatgaaaagt agcagaggaa ggagacagcg 180
caatgttaag aaattcatct taaaatctat atccactctg taacacacaa gacgtcactc 240
tatgggtccc atatatagtc cctgaagggc tctgtgtgt gtgactgcgt gtgtgtgtgt 300
gtgtgtgtgt gtgtgcgcgc taataaaaac tgctcagcag aaatgagcat cagcctcatc 360
ctgtaattag acctctctgc tttgtaacag cttttttttg aatggttgag ttagaagggc 420
agtttttgcg gcttcctgat tggaagtagt gatctatcta tctatctatc tatctatcta 480
tctatctatc tatctataat atattaaata ttaataact gtatattata ttaaagatgt 540
cattaaaaaa tacaatccaa acattatgga acgaccccat tacattcagg ggg 593
```

<210> 849

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 849

agacagcgca atgttaagaa a 21

<210> 850

<211> 18

<212> DNA

<213> Oreochromis niloticus

<400> 850

aggatgaggc tgatgctc 18

<210> 851

<211> 325

<212> DNA

<213> Oreochromis niloticus

<400> 851

tgtgccatcc tctacagcga gacaatttca cagtgtccaa agccgattct ctgcgcttgt 60
 taattgaatc ggattttctta tagtttataaa tccacacaca cacacacaca cacacacaca 120
 cacacacaca cacacacaca gactcatgta gctacagccc aaactgtata aggggtttat 180
 ctagctctgt aaagccaaag caggagatat aaagacacac acagagccac agagagtatt 240
 ttaccggcgt gtttgaacgt ttccaaatct cagaataaaa tgtcttcacc tgctgagggt 300
 tgtgtggctg tctcagtgtg tggga 325

<210> 852

<211> 20

<212> DNA

<213> Oreochromis niloticus

<400> 852

tgcgcttggt aattgaatcg 20

<210> 853

<211> 20

<212> DNA

<213> Oreochromis niloticus

<400> 853

tcctgctttg gctttacaga 20

<210> 854

<211> 255

<212> DNA

<213> Oreochromis niloticus

<400> 854

attcatcaaa cttcagatta gttgggtccct ggttgcttgg aagtttttca ttcacaaagg 60
 attaagggat tcaaggaaaag aaggaaaagt gaaaaggggg gttatgactg aaggagatac 120
 acagaaccca tatatcctgc tgtgtttgtg tgcacagaga tgcgtgtgtg tgtgtgtgtg 180
 tgtgtgcgtg cacaagtgtg tgtgtgtgag tgagaagtca agcagaacct aacaaacact 240
 gaatatggat gagga 255

<210> 855

<211> 20

<212> DNA

<213> Oreochromis niloticus

<400> 855

tagttgggtcc ctgggttgctt 20

<210> 856

<211> 23

<212> DNA

<213> Oreochromis niloticus

<400> 856

cagtgtttgt taggttctgc ttg 23

<210> 857

<211> 621

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 3, 7, 8, 9, 13, 14, 24, 39, 621

<223> n = A,T,C or G

<400> 857

```

tgngttnnnc tcnngattcc ttnggtaccg cgccccccnt cgagggtcgac ggtatcgata 60
agcttgatat cgaattcctg cagccccctg tcttcatggc acacacacac acagataatg 120
tgccctttac tgcaagatgt caaatgctaa agttcctcct taaacagata ttacaggaaa 180
aagagtttgt attttggtgt aagttaacgg ttgtcacaca atcagcttat aaaagtgaac 240
actattcctc actctcacac gcacacacag ggcagcacia atgaacaact gtacggtgca 300
ggattattac agtataagtt ttagaagcga tgactgtgac attcctcctc actgctgagt 360
tcatgactaa gacggattaa ctggacttcc atttctgctt atcatatgga tgggattaac 420
ctgtgctatg gatctcacac acacacacac acacacacac acacacacac acacacacac 480
acacatatat acaggaacag ctcagcacag aacacacact cacactccct gtagtagggg 540
gggatccact agttctagag cggccgccac cgcggtggag cttcaattcg ccctatagtg 600
aggtcgtatt acgcgcgctc n 621

```

<210> 858

<211> 20

<212> DNA

<213> Oreochromis niloticus

<400> 858

ggattaacct gtgctatgga 20

<210> 859

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 859

actacaggga gtgtgagtgt g 21

<210> 860

<211> 605

<212> DNA

<213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 11, 17, 30, 428
 <223> n = A,T,C or G

<400> 860
 gtttgacaac nttgggnacc ggcggccccc tgcagggtcga cgggtatcgat aagcttgata 60
 tcgaattcct gcagcccaaa tcagtatgtg catgttgtat tgcacatgtg tattagctca 120
 gtcgtgtcct tgcctcagcc tcacctcttg gggacaaagg ctctttttcac cacacactct 180
 ctctctttca ctctctttt tctgtctctc tctctctctc tttctctctc acacacacac 240
 acacacacac acacacacac acacacacac acacacacac acacacacac acacacacac 300
 acacacacac acgcacgtgc agaccataa gggcgatttt ggagagcaag tagatcttgt 360
 tacctgtgat ctctctctcc ctcacacaca tgctcgctaa gggggggatc cactagtctt 420
 agagcggncg ccaccgcggt ggagctccaa ttgcgcctat agtgagtcgt attacgcgcg 480
 ctactgggcc gtcgtttttac aacgtcgtga ctgggaaaac cctggcggtta cccaacttaa 540
 tcgccttgca gcacatcccc ttccgccagc tggcgtaata gcgaagaggc ccgcaccgat 600
 cgccc 605

<210> 861
 <211> 18
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 861
 gcctcagcct cacctctt 18

<210> 862
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 862
 ctctccaaat acgcccttat g 21

<210> 863
 <211> 606
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 20, 383, 436, 437, 496, 497, 508, 512, 513, 517, 551, 558,
 569, 587, 605, 606
 <223> n = A,T,C or G

<400> 863
 gtttgaaact tgggtaccgn gccccccctc gaggtcgacg gtatcgataa gcttgatata 60
 gaattcctgc agccctactg cgatcgacta caggcggcag tgcgacttca gcaccacgga 120
 cagtgcctatg aacacagcaa ggcaaggcac tgactgcatg acctgactgt atcaaattac 180
 taaccagcag ggcataaaag aacctctgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg 240
 tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtcctaa aggcagtgac aggaacaggg 300
 agagagaaaag tagtccagta tcacaggctg ggggggatcc actagttcta gagcgccgcg 360
 caccgcggtg gagctccaat tcnccctata gtgagtcgta ttacgcgcgc tcaactggccg 420
 tcggttttaca acgtcnngac tgggaaaacc ctggcggttac ccaacttaat tcgccttgca 480
 gcacatcccc ctttcnncag ctggcgtnat anngaanagg ccgcaccga tcgccctttc 540
 caacagttgc ncaacctnaa tggccgaang gaaatttgta agccttnata ttttggttaa 600
 aattnn 606

<210> 864
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 864
 tactaaccag cagggcataa a 21

<210> 865
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 865
 ctctccctgt tcctgtcact 20

<210> 866
 <211> 316
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 36
 <223> n = A,T,C or G

<400> 866
 gaacagaaga acacaccctg ccagcagaga gctcangttc ctacagactg acgcagtgtc 60
 actcatccac tgtgcacaca cacacacacc gacacacacc cagcctcctt ttgcatgccg 120
 tgttttctaga gatatgcatt caacatttca tgtacacaca taaacaagtc gttgacacac 180
 acacacacac acacacacac tctcatgtat acagtgagat acactctttc tctttttgaat 240
 tagtgatgag ggactgagct gctgaattat gcaggagaca caaagagaga aagttgctga 300
 aactacacat ggttttt 316

<210> 867
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 867
 ttttgcattgc cgtgttttcta 20

<210> 868
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 868
 gcagctcagt ccctcatcac 20

<210> 869
 <211> 636
 <212> DNA
 <213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 2, 7, 8, 9, 10, 11, 14, 15, 25, 33, 34, 35, 39, 43, 51,
66, 372, 484, 522, 578, 594, 597, 603, 608, 611, 619, 624, 636

<223> n = A,T,C or G

<400> 869

```
gnagggnnnn nttnnagctt atctntgact tgnnnaacna agngaaaacc ncgccccctt 60
tggagnatcg acccgatatcg ataagcttga tatcgaattc ctgcagcccc tttatctgag 120
gttgtttgat gaaaattggg gaatattgct ggattatttg ctgatgctta tcaagagagg 180
gtcagggttt atggaacaaa gaatattgaa aatcttaaaa gctgtaacac tgcaccgagt 240
gtttttggtt catttcaccg tctataatta taacacacct ctttctgtat tcttccatcc 300
ttgtccgtaa gtctgtctgc attcttacgt gtgtgtgttt gtgtgtttgt gtgtgtgtgt 360
gtgtgtgtgt gngcaaatct ttttgtctag tgtttgagtg aatctgagtg tttcagaagg 420
tggaccaag actacactct ataaacattc atagcatcta tatcctgtaa aaatatgcat 480
atanacaagt tacatattaa cacctgcagt cacaatagct ancgatggct ttcgctttat 540
tccggaatth tctggaaatc tcttttcccc cctacggngt aaaaaaatat ttgncntaa 600
ggnaaaanat nggccccctnt tttnttacia aaaccn 636
```

<210> 870

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 870

```
ccgagtgttt ttggttcatt 20
```

<210> 871

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 871

```
gtagtcttgg gtccaccttc t 21
```

<210> 872

<211> 581

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 32

<223> n = A,T,C or G

<400> 872

```
gaattcattt gcattccccg ggcggtggcc gntctagaac tagtggatcc cccatccaga 60
ttgtggctgc aatgatcatt ttcacgctcc cttgcctcac cttgtcacct gtttcaatta 120
acatacattt tgtggatcag gaaaggtaag tctaccaaat gctgagacca gaaatgtaat 180
cagtgccaca atagtatatt acagcatttg tctactgatag taacacattc aaatacacac 240
acacacacac acacacacaa aatatttgtt tggtgaaatt tcacagatgt atgcaatcag 300
atacattctc cagtcctgca aaaagcacag tgtgtaactt gtcattctac tctcagagtc 360
tgtcaacacg ctgagtaaat aaagtaataa aacaactggg caacatgggt ttggatcttt 420
tgtgggctgc aggaattcga tatcaagctt atcgataccg tgcacctcga gggggggccc 480
ggtaaccagc ttttgttccc tttagttagg gttaattgag cgcttggcgt aatcatgggtc 540
atagctgttt cctgtgtgaa attggtatcc gctcacaatt c 581
```

<210> 873

<211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 873
 atgtaatcag tgccacaata g 21

<210> 874
 <211> 19
 <212> DNA
 <213> Oreochromis niloticus

<400> 874
 ttactcagcg tgttgacag 19

<210> 875
 <211> 659
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 3, 5, 8, 14, 16, 40, 563, 604, 611, 612, 641, 652
 <223> n = A,T,C or G

<400> 875
 gtnanttttt tctncnatgt ctctttgaaa gccccccgcn ttggcggccg ctctagaact 60
 agtggatccc ccaaacaaca ctaacaatgc agcacaccag gctggaagga agcacacaat 120
 gaatacctct gactccggtc tgtgttgggc tcatagggtc gtttgagtta tctgtaggag 180
 acatccctgt cttacactga actttactaa gctgcagctc tttcctctcc actcactttc 240
 cttttcctca agtctctcct gacccactg tcattgtcgc cattgatttc catctacttt 300
 gcttttgctg aatcccgtc atgtcgccaa cgtcacttcc atctgcctgt ctgtccgtca 360
 ggctgctgtc ccacgacact gaagcagctc gtgagggcga ggaggaagag aagcagaaaag 420
 accggggggtt ggggtgaaaa gagctagatt catttagcac acacacacac acacacacac 480
 acacacacac acacacacac acacacacac tgacgtaatg agtctaata tttgcatcca 540
 gttggaagat cacaaaattg canggggctt gcaggaattc gatatcaagc tttatcgata 600
 ccgncgacct nnaggggggg ccccggtacc caagcttttg ntccctttta gngaggggc 659

<210> 876
 <211> 16
 <212> DNA
 <213> Oreochromis niloticus

<400> 876
 ggcgaggagg aagaga 16

<210> 877
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 877
 actggatgca aatcattaga c 21

<210> 878
 <211> 802
 <212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 17, 566, 624, 627, 656, 682, 693, 737, 742, 751, 758, 775,
776, 786, 790, 793

<223> n = A,T,C or G

<400> 878

```

tttgaatgcc cttccangcc cccctcgag gtcgacggta tcgataagct tgatatcgaa 60
ttcctgcagc ccacattatc caatgcacag gtgtggaaaa agagcagcaa tgtgcacaga 120
cactgatgat gttacactgt cagtaaaaa atcagtaggc ttaactctga aggaacactg 180
acacagcaaa attgcatcag tgtaaatccc atcttaatca caacataata ctaatgatgg 240
tgcaggctta cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca 300
cacacacaca cacacacact cttttaatgc catcagtggg tgctgcacat cttctgcagg 360
taaaatttct tgttcttctc tgaaacggct gtagcagaat ttattttatt gtactgtctg 420
tgatagcttt acagcaatca cagcagcaga cagtgactcc actgctgttc gtgcagatat 480
gcaaaaactaa agcctcggtc aacaggcaca tgtgaacacc tgctcttagc tcagctctgc 540
tctctgtctg atgtgaaggg tcagtnggtg tgaacatgtg gtgcttgtgg gggggggggg 600
atccactatt ttctagaagc gggncgnccc cgggggtgga gctccaattc gccctntag 660
ggagtctgta ttacgcgcgc tnaactggcg gngtattaca acggtcgtga ctgggaaaac 720
cttggcgta cccaantta antcgcctt nagcaaaant cccctttttg ccagnntggg 780
gtaatngcgn aanaggcccc ct 802

```

<210> 879

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 879

```

ttaatcccat cttaatcaca a 21

```

<210> 880

<211> 18

<212> DNA

<213> Oreochromis niloticus

<400> 880

```

ctgagctaag agcagggtg 18

```

<210> 881

<211> 598

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 3, 14, 26, 32, 39, 557, 570, 584, 593

<223> n = A,T,C or G

<400> 881

```

tcnctttgac tctnatccct ttgganaccc cnccttnt cgaggctcgac ggtatcgata 60
agcttgatat cgaattcctg cagcccacat ttatacatca agtccttagt gcacctgttg 120
caaacgattg aaacatgttt tactgtgttt ctcagtcata aaaagcttga aattcttaaa 180
aagggtgttg aacgctcttc ttcaatccca gagctttcat taccaattaa actagagcta 240
gacacagcct cgcctattgg tgtgtgtgtg tctgtgtgtg tgtgtgtgtg tgtgtgtgtg 300
ggaaacccca ctaaaactcaa gatgggggtg gggattttaa tgggtgtcaa aataaagggg 360

```

```

ggtccacttg tccacagttg ctatagaaac accaaatgtg aaatacaaaag cgactccaag 420
gctaaactct atattggtgg ccacatgcga aatacatata atgaagtaaa actagggttac 480
tttactctac ttaaaactacc tgtctgggat tttgtatcaa ataaaaatccc aacactgtga 540
tgcatttatg atccacnaac attgtgtccn gtataactaa actnccccct ttnggggc 598

```

<210> 882

<211> 18

<212> DNA

<213> *Oreochromis niloticus*

<400> 882

cccagagctt tcattacc 18

<210> 883

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 883

ccaccaatat agagtttagc c 21

<210> 884

<211> 665

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 2, 3, 6, 19, 46, 117, 586, 594, 661

<223> n = A,T,C or G

<400> 884

```

anntngaag cccttgganc ggcccccccc tttaggtcga cgggtancgat aagcttgata 60
tcgaattcct gcagcccaca acaacacgca gctgcttccg tgctgcactt ttactgnggg 120
cggggcttcg ctcacacaca cacacacaca cacacacaca cacacacaca cacacgaaag 180
caggtgaggg aagataaggt gttgctcagg actaacaggt gtttttacct gcagacgctt 240
tactgacaca gtttggaaga acgagtctga acagactttg ttcaattaat gataacgagt 300
cagatgttga ctttgattaa aaacaagcag tgacatcata atcataatca gtcacaca 360
ctaatactca tgttattctg ttaatctccc attattacta cattacctgc tgtaacacag 420
aatacttcat tgttctgttt tgactttatt tgttactcaa atatttgata tgctgacagc 480
agaagtctgt tattaagtta taagctcgta taaatactca gaagcaacaa tgatgatgat 540
gtttcaagct gctgtaacac aggatgaatg aagcctgtgt gtgtgncgtc ctgngggggg 600
atccactagt ttctagagcg gccgccaccc ggcggtggga gcttccaatt cggcctatag 660
ngggg 665

```

<210> 885

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 885

tgggagatta acagaataac a 21

<210> 886

<211> 18

<212> DNA

<213> *Oreochromis niloticus*

<400> 886

ctgcactttt actgaggg

18

<210> 887

<211> 441

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 104

<223> n = A,T,C or G

<400> 887

```

tcataagaaa gttgatgttc tgtatatctg cagttttcgt gtgtgtgtgt gtgtgtgtgt 60
gtgtgtgtgt gtgcatcaaa tctgttaggc attgcaaaca ttgnggaggg atgttcagaa 120
atgtgaacac atacagtgat acagagggag attaaaaggt atgtctgtga tttgaatggc 180
tctttctcct cacattttca tttctaacat ttacatacgt taatcttcac atatacattt 240
ccgatgtgtt tgggtgcaca accttttcca gtctatcgct gttccagctt ccgttgttgc 300
taatgtgact gtgagtggta agaaggcaaa aactgtgaag tgactcacac ataagtatct 360
ttaacaattt tcagcctagc gggtaggtct gccaatatgt cagtggggct ggcaccctg 420
atgggcacac atcattgata t                                     441

```

<210> 888

<211> 27

<212> DNA

<213> Oreochromis niloticus

<400> 888

aagaaagttg atgttctgta tatctgc

27

<210> 889

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 889

tgaggagaaa gagccattca a

21

<210> 890

<211> 135

<212> DNA

<213> Oreochromis niloticus

<400> 890

```

agccttttca gtctttgtat atgtgtacag tacgtatatg tgtgtgtgcg tgcctgtgtg 60
tgtatacgtat tatatgtgtg tgtgtgtgtg tgtgtgtgtg atgaatgggc aagtgcgaag 120
cagcgttccc ttgggt                                     135

```

<210> 891

<211> 20

<212> DNA

<213> Oreochromis niloticus

<400> 891

gccttttcag tctttgtata

20

<210> 892
 <211> 18
 <212> DNA
 <213> Oreochromis niloticus

<400> 892
 gaacgctgct tggcactt 18

<210> 893
 <211> 640
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 4, 5, 29, 76, 469, 489, 499, 520, 610, 640
 <223> n = A,T,C or G

<400> 893
 gtttnaatcc ttgggaagcc ccaccgcnt ggcgccgct ctagaactag tggatcccc 60
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 ctctgccaat agcaagtgg ctctctggga ctaatgagta gctaggtaat tagagggttg 180
 cttgattcta ccttactcac aagcaaaca gcacacataa acactctctc tctctctctc 240
 acacacacac acacacacac acacacacac acacacacac acacacacac acacacacac 300
 acacacattt acaaatgcaa cacatatctg gatgttggta tgtggctctt tctctctgcc 360
 taaatgggtg ggctagccat atgtcacagc agttgtgctg cattagtgcg ctgggtgata 420
 tactttaatg aacctgcttc tgagaaggaa agggaaggag gcgtgtttnc taaatttttt 480
 gggctgcang aattcgatnt caaagcttat cgataccgtn gacctcgagg gggggcccg 540
 taccagctt ttgttcctt ttagtgaggg ttaattgcc gctttggcgt aatcatggtc 600
 atagatgttn ctgggtgaa aatggtattc cgtcacaa 640

<210> 894
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 894
 gacttagcct ctgccaatag c 21

<210> 895
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 895
 agccacatac caacatccag 20

<210> 896
 <211> 207
 <212> DNA
 <213> Oreochromis niloticus

<400> 896
 tgaaagatga agctactcac ctctgagaag tgagtgggtt gtctttgtgt tttgataaat 60
 tataatgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt 120
 cacatgtctg gaaatgactg ttagatgagg aattccataa acgagtgtgc ttgtttgggtg 180

ctgtgatgtc atggagtcag tctgtca 207

<210> 897

<211> 22

<212> DNA

<213> *Oreochromis niloticus*

<400> 897

gtgggttgtc tttgtgtttt ga 22

<210> 898

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 898

cagcaccaaa caagcacact 20

<210> 899

<211> 391

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 344, 345, 368

<223> n = A,T,C or G

<400> 899

tcttatcttt gtgacatctc actgtgtttt tcatgctttg tgtgtgtgtg tgtgtgtgtg 60
 tgtgtgtgtg tgtgtaattt ccaactgcagg aaatatcgga gcagagctct cttacaacaa 120
 tgttggcatg ttcatatcat ctgatgctgg caatacctgg agaccggtga gcctcacacc 180
 tacatttaca cccacagcca gcagacctgc agcagtttca aactttgaca gatgatgtaa 240
 aaaattaaac actttttacaa atattgtatt ttctggcttc ttgttatgta acacctttag 300
 tttccactcc agcttactgc aggttacaac aggctttttt atannacact tcagacacgc 360
 tacacggnaa agcaagagtg cagacaatga t 391

<210> 900

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 900

actgtgtttt tcatgctttg 20

<210> 901

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 901

ggtgtaaatg taggtgtgag g 21

<210> 902

<211> 442

<212> DNA

<213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 78, 385, 399, 417, 436
 <223> n = A,T,C or G

<400> 902
 ccctcagttc ctgtgacaat gacgtgcagc agtttgttct ggttctgggtg gcgtaacggt 60
 tgttttctgg ggctgctnta atgtttctgt ttgacatcgt aaatctttgg ggtcgtctta 120
 ttggtcccat catggtcaca tggcttcaga tgtttctgta taatcccgtc cccacctgca 180
 caccctctgt agtgcaaccg catattttta tttgactgtg tgtgtgtgtg tgtgtgtgtg 240
 tgtgagaact gcagcgtcct gactataaaa tgatttagaa ggaaaataat ttttctttgt 300
 tggaccacgt ttttgaccac caggtggagc tgtggttgct gtgcaggag gcaagcacct 360
 gcagccaatc atagccggtt gtggtgttt gagctgaang gaactcgtgg atgtttncac 420
 cttcatgttt taaggntttg gg 442

<210> 903
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 903
 gtataatccc gctcccacct 20

<210> 904
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 904
 atagtcagga cgctgcagtt 20

<210> 905
 <211> 602
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 5, 9, 12, 14, 22, 31, 35, 47, 64, 65, 89, 112, 458, 475,
 521, 602
 <223> n = A,T,C or G

<400> 905
 atttnaaant gnanacttag angatcctcc nctanctggg aaaaccncct aggggatccc 60
 ccanncacac gcacatatgt cattttttnc atatctcagt gagaacatct anggggcata 120
 accctaacca tgacctgtaa ctgtaaccct gacactaaac cacatttaga gtctaaaaga 180
 tgcttcaaaa cttgtgggga ccatggatat aaatacacac acacacacac acacacacac 240
 acacacacac acacacacac tcaggtgcag gtctcgagag cagagcagga cttggtcctg 300
 tgcagcttct cccagaagtt ggagtcaagc ggggggctgc aggaattcga tatcaagctt 360
 atcgataccg tcgacctcga gggggggccc ggtacccagc ttttgttccc tttagtggag 420
 gttaattgag cgcttgccgt aatcatggtc atagctgntt cctgtgtgaa attgntatcc 480
 gctcacaatt ccacacaaca tacgagccgg aagcataaag ngtaaagcct ggggtgccta 540
 atgagtgagc taactcacat taattgcgtt gcgctcactg ccgctttcca gtcgggaaac 600
 cn 602

<210> 906

<211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 906
 acctgtaact gtaaccctga c 21

<210> 907
 <211> 18
 <212> DNA
 <213> Oreochromis niloticus

<400> 907
 aagtcctgct ctgctctc 18

<210> 908
 <211> 596
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 2, 3, 8, 24, 26, 42
 <223> n = A,T,C or G

<400> 908
 tnnaagcnct ttggaagacc cgcngngttt ggcgatctag cnctagtgga tccccccctg 60
 gggaatcatt attttaacaa gtgtcctcac aacaatagtt aaacaaacgt gtgtgtgtga 120
 aaggggaaca ttccatccat tcttgggtctt cctgaggaaa aagcaaaaac atcacacaca 180
 caaactgaca cacacacaca cacacacaca gactgttgac agcaggcagc aggaaagggtg 240
 cacatacacg cctctaaggt cattcacaca tccgcctcgt ctttcagctc tccgcccatac 300
 aagtcctagt agtttttagcc atcaatccat ctggcagtcct atttttattt tggcagacat 360
 gcttctcctg ccattagtct acaattcaaa actactccta cattaagtat acaatgaata 420
 tcctgtgggc tgcaggaatt cgatatcaag cttatcgata ccgtcgacct cgagggggggg 480
 cccggtaccc agcttttgtt cccttttagtg aggggttaatt gcgcgcttgg cgtaatcatg 540
 gtcatagctg tttcctgtgt gaaattgtta tccgctcaca attccacaca acatac 596

<210> 909
 <211> 18
 <212> DNA
 <213> Oreochromis niloticus

<400> 909
 cattcttggt cttcctga 18

<210> 910
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 910
 aaactactag gacttgatgg g 21

<210> 911
 <211> 586
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 36, 492, 530, 548, 564, 580, 585, 586
 <223> n = A,T,C or G

<400> 911
 acctggcaaa caacacacta aggttggaca actggncgaa tttatcgacc atcgatcata 60
 gactgagcct ttcaccgatt gtttttacia gagcgattta ttcattttcc cattagtaag 120
 tctgctaata atgttggttg aagctaagag aagcagtcca cacacacaca cacacacaca 180
 cacacacaca cacacacaca cacacacacc cccttttcca gctgtgagca aatgcatgct 240
 cttcagagtg cgacaaatga ctccfitttc atggatatgaa acaacatcat ttccttgaca 300
 gatatttaga tatagccaga gtgcacagtg tccacctggg gctgtctttt tcatatttaa 360
 ccatttttagt caaatcactt tggatattct gctggtgaaa agctttttccg gagcttgtca 420
 atcaaaaagt caccaaaagt cacctgcatg aatatattgc ctatcgatcat ttattgggac 480
 tgatgaatgt cngtttggaa aaaattttta gtttttcacc ccaacctttn ctaccgcacc 540
 caaagtnttg gtatttagta attntaaaac ctctttaccn aggann 586

<210> 912
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 912
 tggcaaacaa cacactaagg t 21

<210> 913
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 913
 gtcatttgtc gcactctgaa g 21

<210> 914
 <211> 296
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 914
 tgagacttcg tcatcagtgg tccacagttt tccattcttg tttcccaccg actgaagaaa 60
 caaaggcaga agccaatcag attttcaactt tttctttttg tgcgcgtgtg tgtacacaca 120
 cacacacaca cacacacaca cacacacaca cacacacact tcttgccctac 180
 atgtaggggt ctccacttac ccggtcattc atgagcaagt ccttcacaat gaagttggca 240
 acaatggatt tcattgggga agcaaaactga tctggagcca gcatggaaat atgggg 296

<210> 915
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 915
 aaaggcagaa gccaatcaga 20

<210> 916
 <211> 20
 <212> DNA

<213> Oreochromis niloticus

<400> 916

tttgcttccc caatgaaatc

20

<210> 917

<211> 606

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 2, 3, 5, 16, 18, 34, 42, 483, 574, 601, 602

<223> n = A,T,C or G

<400> 917

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tnntnttttg actaananat ctcttggata ccnngccccc tntcgaggtc gacggtatcg 60
ataagcttga tatcgaattc ctgcagcccc ctatcagcag gtgggctttt ggtttagtaa 120
aacacacaca cacacacaca cacacacaca cacacacaca cacacacaca cacacgtgca 180
tgtaagcgca cacacataca taccacaatg tatacataca gcaacttgtg cacaagcccc 240
tttaggtaaa ataccttcga gccacaact ccaaatcaag ccaccacccc ccaatgcaca 300
cactcacgct ctacataacc ttggagttaa gcgagcgtag ctgagcgctc gcagctcaat 360
ccccccaacc cctctcccca cctttaatct gatttgacgt tcagcaatac agggacacac 420
atagccaca catgcataac atactcctta aatacacaca cacagaagga ggaaggccgt 480
gtnaacgttt ctgaactgca gtcttgtgta aacacctgcc agtaatctag cagctgagat 540
gaatccagat gaagcagagc ctgggtttaca ggtncctttac aggttggggg tacttggggg 600
nngaatt                                     606

```

<210> 918

<211> 20

<212> DNA

<213> Oreochromis niloticus

<400> 918

tatcagcagg tgggcttttg

20

<210> 919

<211> 20

<212> DNA

<213> Oreochromis niloticus

<400> 919

ggtggcttga tttggagtgtg

20

<210> 920

<211> 314

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 133

<223> n = A,T,C or G

<400> 920

```

ccatatttcc atgctggctc cagatcagtt tgcttcccca atgaaatcca ttgttgccaa 60
cttcattgtg aaggacttgg tcatgaatga ccgggtaagt ggagaccctt acatgtaggc 120

```

```

aagaagtgtg tgngtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tacacacatg 180
cgcacaaaaa gaaaaagtga aaatctgatt ggcttctgcc tttgtttctt cagtcggtgg 240
gaaacaagaa tggaaaactg tggaccactg atgacgaagt ctcacctgaa gttcttgcta 300
aggtaaaggg tgat 314

```

```

<210> 921
<211> 20
<212> DNA
<213> Oreochromis niloticus

```

```

<400> 921
aaaggcagaa gccaatcaga 20

```

```

<210> 922
<211> 20
<212> DNA
<213> Oreochromis niloticus

```

```

<400> 922
aaaggcagaa gccaatcaga 20

```

```

<210> 923
<211> 817
<212> DNA
<213> Oreochromis niloticus

```

```

<220>
<221> misc_feature
<222> 3, 8, 9, 26, 54, 78, 159, 162, 189, 388, 398, 400, 408,
      421, 433, 446, 455, 471, 473, 545, 553, 575, 588, 598, 600, 620, 624,
      628, 638, 643, 656, 668, 684, 686, 709, 727, 739, 740, 751, 771, 774, 790, 794,
      803, 812, 816, 817
<223> n = A,T,C or G

```

```

<400> 923
ttnacttnnt gattcccttt gaaagnggcc cgcggccggt ttagaactag tggntcccc 60
ccaggtgcag gcagacanca gatacactca tggagataa acggacccaa cacacacaca 120
agcacgcaca ggcacacagc gaaggataaa tggaccant ancagggagg tctgacagaa 180
tgctttttna cacctggctg agcccagcgg aaggtgacag agtcacatct cccaaagcga 240
acacacacac acacacacac acacacacac acacacacac acacacacac cttctcacat 300
tggggagttc aggggtcataa gcagcatcat gaataaaatg aggtgtctt aaacagaagg 360
agctctgtgt atgcatgtgt gtgggtgngt ttgtatgngn gagactgngt ttgtgtttgt 420
ncaaggggct gcnggaattc gatatnaagc ttatngatac cgtcgacctt nanggggggc 480
ccggtaccca gcttttggtt ccctttatga gggttaattg cgcgcttggc gtaatcatgg 540
tcatngctgt ttncttgtgt gaaaatgata ttcgntcaca atttcacnca acataccnan 600
cccgaagca taaagtgtan aagnctgngg tgcctaanga agngagctta cttacnatta 660
atttggtntg cgcttacttg cccngntttc aagttgggga aacctgtcna tgccagctgc 720
tttaanaaaa tcggtcaann cccgggggaa naagccggtt tgctaattgg nccncttttc 780
ccttacttgn ttanttgact ttntgggttg gnatggn 817

```

```

<210> 924
<211> 19
<212> DNA
<213> Oreochromis niloticus

```

```

<400> 924
ccagcggaag gtgacagag 19

```

<210> 925
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 925
 cctgaactcc ccaatgtgag a 21

<210> 926
 <211> 791
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 2, 6, 11, 12, 13, 25, 577, 656, 713, 721, 746, 766
 <223> n = A,T,C or G

<400> 926
 tnttgnactc nmnaagcccc ttccnagccc cccctcgagg tcgacgggat cgataagctt 60
 gatatcgaat tcctgcagcc cccagtataa atgggaggat ttcttggtgt tatagtgtaa 120
 taaggggtgac gatcaacagg tggagataat ggagcttagt ttcattgagc caaaaaaatc 180
 acacacacac acacacacac acacacacac acacacacac acacacacac acacacacac 240
 acacagtctc tgtgcaacct caacacatca ataaattaca tcagatgcat agattaccat 300
 tacaaatcct ttccacagta tcagacactg tacgtcttcc tcctgtggat taatgtctcg 360
 tttcatcagc atccaaaaaa atgctctttg agctttggat tggtgaaagt aagaaagtga 420
 agaggaaaagt agtagttgca gttgaaacat agagagggtt gggctttttt tgcgtggggg 480
 gagttagact gaagaagatg caggtgggct gccggcgat gtgtaaaaac ctacttgtga 540
 acttggttgt ggggggatcc actagttcta gagcggncgc caccggcggt ggagctccaa 600
 ttcgccctat agtgagtcgt attacgcgcg ctcactggcc gtcgtttaca acggtngtga 660
 ctggggaaaa cccttggcgg ttacccaac ttaatcggct tggcagcaca atnccccctt 720
 ngccagcttg gcggtaatag ccgaanaggc cccgaccga atcggnctt tccaaacagg 780
 ttgggcaagc c 791

<210> 927
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 927
 gggaggattt cttgttgta t 21

<210> 928
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 928
 ggaggaagac gtacagtgtc 20

<210> 929
 <211> 329
 <212> DNA
 <213> Oreochromis niloticus

<400> 929

```

aaaaggggtt tgctggcaca caataaaaaa atctacacac acacacactc aggcacagac 60
acacgcagac acacacacat cgcacaggta caaagaacaa aaaaaacaag ctcataaagg 120
cacaaacaga cacatctata cacacacaca cacacacaca cacacactct cacacacatg 180
tgcagccctc cggtcctgat caatacatga caagagtaaa tctcctccgg acgtcaggca 240
gtccaatcaa agggccttggg gttccttatag gggatcacaa gagccagggg gagacaaaca 300
atgatgtgaa tcctcaacaa caccacaat                                     329

```

<210> 930

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 930

ggtttgctgg cacacaataa 20

<210> 931

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 931

ctggctcttg tgatccccta 20

<210> 932

<211> 586

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 3, 8, 9, 12, 13, 15, 16, 23, 24, 562, 576, 586

<223> n = A,T,C or G

<400> 932

```

ttnttttntt cnnngnnattc ctnnatcccc ggcgggttccg ttctagaact agtggatccc 60
ccactcagaa tctcttttcac ataccaagca tgcacacaga aacagatata cacacaaact 120
ctctcgcaat ccattcacaca cacacacaca cacacacagc gaacaaagtg tcagggtggca 180
gtggaaacgt ggtgatttgt tcctcctgac agacaggaaa taagggagtc gaccagggac 240
ctcacttcct ctaagatctg actaacctga catctatcag acaaccccc ccacacacat 300
gcattcacac tgcctcccaa tgtttggtct actctaaaac acatgcacac acacacacac 360
acacataaat tcaccatcca tcaggctcct aagtccccgc aggggggggct gcaggaattc 420
gatatcaagc ttatcgatac cgtcgacctc gaggggggggc ccggtaccca gcttttgttc 480
ccttttagtga gggttaattg cgcgcttggc gtaatcatgg tcatagctgt ttctgtgtgt 540
aaaattgtta tccgcttaca anttccacac aacatncgag cccggn                                     586

```

<210> 933

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 933

gacagacagg aaataaggga g 21

<210> 934

<211> 17

<212> DNA

<213> *Oreochromis niloticus*

<400> 934

agcctgatgg atggtga

17

<210> 935

<211> 871

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 6, 7, 19, 20, 25, 27, 39, 50, 551, 581, 582, 600, 608, 609,
612, 614, 634, 663, 670, 673, 677, 679, 682, 709, 720, 756, 764, 767,
768, 771, 799, 800, 823, 841, 850, 852, 859, 863, 869, 870

<223> n = A,T,C or G

<400> 935

```

ttgatnnaag tgatctcann gaacncncct cagggtttang gaatcgatcn cttgatatcg 60
aattcctgca gcccatccat tgtaaaacttt ctataaaactc tgtaaacatt gattcaaata 120
taggctgtaa tggtaagctg cgttgtctgt agcagcggca ttcacagcat ctctagcata 180
agcatgaagc ttagtcacat accatgtaat gcatgtaggc tgcataatgg cgtcagcata 240
tgttatgctt ccacatcctt gaacatccta tacacacaca cacacacaca cacacacaca 300
cacacacaca cacacacaca cacacacaca ccccaacaca cacacacaca cacaaagact 360
actcagcagc acatgtgctg ccacttttcc cacagggctc tgtagaaata actacaaaca 420
catattgtgg gggatccact agttctagag cggccgccac cgcggtggag ctccaattcg 480
ccctatagtg agtcgtatta cgcgcgctca ctggcccgctc gttttacaac gtcgtgactg 540
ggaaaaccct nggcgttacc caacttaatt cgccttgaag nnattcccctt ttttgccaan 600
gtggggggnna tnancaaaaa agggccccga cccngaattg gccttttcca aaaaaatttg 660
gcncaaaccn ttnaatngng cnaaaatggg aaaatttgta aagccgttna aataattttt 720
ggttaaaaaa ttccgggggtt aaaaattttt ttggtnaaaa atcnagnntt natttttttt 780
taaacccaat tagggcccn naaaatcgggc aaaaaattcc ccntttttta aaattcaaaa 840
nggaatttgn ancccgagna ttnggggggnn g 871

```

<210> 936

<211> 17

<212> DNA

<213> Oreochromis niloticus

<400> 936

ggcattcaca gcatctc

17

<210> 937

<211> 20

<212> DNA

<213> Oreochromis niloticus

<400> 937

atgtgctgct gagtagtctt

20

<210> 938

<211> 376

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 21, 55, 58, 68, 71, 74, 372

<223> n = A,T,C or G

<400> 938

```
ccccattatt tattgggggt nccaaattaa ggtaaattta gggaaggaag ggggnagnag 60
gtaggggnag nagnagtcatt ttcctctccc ttctggttg catggtgctt aagccttcaa 120
aatgctgaca tcagcactca gctctgacta caacgaccga aaacacgcac gcacacacac 180
acacacacac acacacacac acacacacac acacacacac acacacacac agttcagttc 240
agtaacaggt ttgagctaaa tgctctattc aagatgcatt ttaatcagca gcagcatcaa 300
catgattgca actgcggtgt atgacaaccg catcatataa catcatcttt cattcatcag 360
tggtcagat anctgc 376
```

<210> 939

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 939

```
aagccttcaa aatgctgaca 20
```

<210> 940

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 940

```
gcaatcatgt tgatgctgct 20
```

<210> 941

<211> 471

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 13, 18, 33, 36, 202

<223> n = A,T,C or G

<400> 941

```
tggacattgt tcnaaccntt ttgtgtatac ccncanctcg tgtctatgga gaccgcagca 60
acattgagag caaacaccgg gagctcggtt actcgagcgt tcacaccgaa ctcacttgt 120
gcgttactgt gtgaaagtgc ggcacgggtt cagtgactca gtaatatcta aacttcgaaa 180
taagttgagc ttactttatg tncacacaca cacacacaca cacacacaca cacacacaca 240
cacacacaca ccgggtactg aatttaatta aaatctgggt aactgtctaa agtaatggct 300
gcgttaataa gaacacagcc aatatcagta taattatcgg tgggtggtgat cgggtgcgtct 360
ctcacgcttc tttcctgcc gactgtcgct ctgtgctcag aatgagatct gtcccgtctg 420
agctgttaac cagcccatct tctgttttgg ggacaaaaac aaacattaag a 471
```

<210> 942

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 942

```
cgaacctcac ttgtgcgtta 20
```

<210> 943

<211> 20

<212> DNA
 <213> *Oreochromis niloticus*

<400> 943
 cgatcaccac caccgataat 20

<210> 944
 <211> 354
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 944
 atccattgta aactttctat aaactctgta aacattgatt caaatatagg ctgtaatggg 60
 aagctgcgtt gtctgtagca gcggcattca cagcatctct agcataagca tgaagcttag 120
 tcacatacca tgtaatgcat gtaggctgca taatggcgctc agcatatgtt atgcttccac 180
 atccttgaac atcctataca cacacacaca cacacacaca cacacacaca cacacacaca 240
 cacacacaca cacacacccc aacacacaca cacacacaca aagactactc agcagcacat 300
 gtgctgccac ttttcccaca gggctctgta gaaataacta caaacacata ttgt 354

<210> 945
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 945
 tctgtagcag cggcattcac 20

<210> 946
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 946
 acagagccct gtgggaaaag t 21

<210> 947
 <211> 618
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 7, 9, 14, 17, 43, 45, 57, 555, 579, 598, 603
 <223> n = A,T,C or G

<400> 947
 gacctntnt attncanaca gatcttcttg gaaacccgcc cntntcgag gtcgacngta 60
 tcgataagct tgatatcgaa ttcttgcagc ccccttagtg atagacttag caataccgat 120
 tggcagtaga aggaacacac acacacacac acacaaatat atatgactga agaagtcagt 180
 tggatgactg gcaaaatggt tctcctcctg aaaacactat gtccagatga acagaatcaa 240
 cctttgggga catatgtatg tatatatata cacataaaat aacctgcaat aggtgaagta 300
 gtagccagct ttatTTTTTA atTTTTtatt aaggctgtaa aaccctcac taaacacttt 360
 atagactttt tctcagatag gcatgaacat tttcagactt ttctctcttg tttgggggat 420
 ccactagtgc tagagcggcc gccaccgcgg tggagctcca attcgcccta tagtgagtcg 480
 tattacgcgc gctcactggc cgtcgtttta caactgtcgt gactgggaaa accctgggag 540
 ttacccaact taatnccgct tgcagcacat ccccttttng ccagcttggc gtaatagncg 600
 aanaggcccc caccatc 618

<210> 948
 <211> 17
 <212> DNA
 <213> Oreochromis niloticus

<400> 948
 gcataaccgaa ccgaaaag 17

<210> 949
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 949
 tgtagaaatg atgagccaaa a 21

<210> 950
 <211> 794
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 5, 6, 7, 8, 9, 11, 15, 25, 34, 598, 658, 669, 776, 786, 794
 <223> n = A,T,C or G

<400> 950
 gtttnnnnnt ntgtnaatct tttgnccgtg gccncggccc gctctagaac tagtggatcc 60
 cccccctgct ggacacatag atgaagtctc aaacatttat ttgcaagggt gggaagttga 120
 gtgctgaatt atgggtaatg agtttggtcc aaaatggatg cacagtgtgg tgtaacatct 180
 aaatctccac gcagtccctg gctctctctc tctcatttag ctgtggtgta gaacacagct 240
 ttgaatttca tttcaggctg tggaattatt tacagacaac acacttcctc atagtgtgta 300
 ttgacattaa agaaaatcaa tcagtgtaat gacggggagt tttaatctac tgagggcagc 360
 gatggatctg aagcagctgc tcacacacac acacacacac acacacacac acacacacac 420
 acacagtcag taaatggtta ttttaatacc tgttgatctg taattttgaa cctgctccgg 480
 agcagatttg tggagcaatt acaccgtcca tggggctgca ggaattcgat atcaagctta 540
 tcgataccgt cgacctcgag ggggggcccgt gtaccagct tttgggtccct ttagtgangg 600
 ttaattgcgc gcttggcgta atcatggtca tagctgggtc ctgggtgaaa ttggtatncg 660
 tcacaattnc ccacaacatc gaagccgga gcataaagt taaagcctgg ggtgcctaata 720
 gaggtgagct aacttacatt aattgcgttg cgctactggc ccgttttcca atcggnaacc 780
 tgtcnggccca cttn 794

<210> 951
 <211> 19
 <212> DNA
 <213> Oreochromis niloticus

<400> 951
 ctaaattctcc acgcagtcc 19

<210> 952
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 952

tgtaattgct ccacaaatct g 21

<210> 953

<211> 361

<212> DNA

<213> *Oreochromis niloticus*

<400> 953

```
gccgtctcct tcgactgaca gtacagacgg cagcgctcgt cagctgagac acacaaacgg 60
gtcagtgcag gagtttcaca tcattctgaa aacatctgct gacatctgct aacgtctgct 120
aacatctgct aacatctgct aacatctgct cgacactaaa gagttaaagg aggagagttt 180
tcctccagca gcagattcct cactgatgac ttttacatgt gcgcacacac acacacacac 240
acacacacac acacacacac acacacacac gtttctatgt ctctgtgagg accctcagtt 300
acataacgta tttccgagac tataaatctg aagctggaaa cctcgcctga atctccgaac 360
a 361
```

<210> 954

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 954

agagttttcc tccagcagca 20

<210> 955

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 955

ggagattcag gcgaggtttc 20

<210> 956

<211> 655

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 7, 9, 495, 501, 547, 552, 573, 590, 598, 600, 605, 610,
615, 626, 630, 634

<223> n = A,T,C or G

<400> 956

```
ttgtttncnt ccgttggaag cccccgcgg tggcgccgc tctagaacta gtggatcccc 60
cacgcaccag cataaagcca tccacataca tttcaaatca aactgtgttt agagaaaccg 120
caacctcttc ttttcagatg tgactcccag ctgcctggag gaaaatggat taacacacac 180
acacacacac acacacacac acacacacac acacacacac aagctctgtc cacacctcca 240
atcacgttct agcacaccaa gtgcttcacc cacccttat taacgcacac attcacacgc 300
agaggggatc tctctctttt tgcacaagtc tattattagc tgttcaaccc agagacaaac 360
taatgacacg ttgggatgaa tcaccagagc tgctgccttc gactatcatt aactcacag 420
cagagctact gtagagacat ccatgtagga tgctgggggc tgcaggaatt cgatatcaag 480
cttatcgata ccgtnacgt ngaggggggg cccgggtacc agcttttttg ttcccttttag 540
tgagggntta anttggcgcc gcttggcgta atnatgggca tagctgttn cctgggtngn 600
aattngttan tccgntcaca aatttncccn caancattac ggaggcccgg gaagc 655
```

<210> 957

<211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 957
 aaaccgcaac ctcttctttt c 21

<210> 958
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 958
 gttaataggg ggtgggtgaa 20

<210> 959
 <211> 553
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 2, 4, 5, 6, 7, 8, 9, 11, 12, 15, 18, 20, 23, 25, 27, 29,
 36, 39, 40, 50, 56, 58, 101, 102, 553
 <223> n = A,T,C or G

<400> 959
 gngnnnnnng nntantntn ttntntntnt agatcnaann gaactctccn gcgttnngng 60
 ccgctctaga actagtggat cccccacgtg cgtgcagctg nngagcacct tgctcatttg 120
 cactgtgtaa ctattcattt ttatatgctt gtttctcttt atgaataata aaccagcgtg 180
 tatcccagcc tctctcttag gtcgtgcata tgtgccaga tgttccagca gtcacttaat 240
 gtgtttttat tgttgatgga tctgttttct tctgacagcc agactgcatg ctcactctcaa 300
 gagagggctg tatctatgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgttgctcac 360
 tgggcttcta cagctacagt ctcttaataa tagatcgcca tcatggtaac cgttgttgtg 420
 ctgaccttaa gtgctgcaca gtgctaaaac agacaccagc ctcgactagt gttttcctgc 480
 tgaagtaagt gcaccgtcat ccacagtctg tctctctctg actgaggaca gacagacagc 540
 caagcagagg agn 553

<210> 960
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 960
 tgaataataa accagcgtgt a 21

<210> 961
 <211> 17
 <212> DNA
 <213> Oreochromis niloticus

<400> 961
 tagaagccca gtgagca 17

<210> 962
 <211> 638
 <212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 5, 496, 585, 602, 612, 618

<223> n = A,T,C or G

<400> 962

```
aagcnaccac cccagtgtta cacagatggg ataagtttct gtatgctaaa atgcaatgat 60
tgtctttttt tgaacataat gattcaaagt aacacacaca cacacacaca cacacacaca 120
cacacacaca cacacacaca cacacacaca cacacacaca cacaaaagta gctctatttc 180
cacctcaacc attcacaaaa cagtagctac ctggccttgc tatatgatca ccttacaaca 240
aacctatgca cactattttt gttcagtgtt catgccattc acctaatgga tatagacatt 300
agtccatgtc cttgatagtc ctgatggttt ccaacgttac tggcatgacg agcagaaccc 360
acctgtgatg ctttctacat gccacagtgg agggggcgcc ataatggtct ggggaacttt 420
ttccttcagt ggaacaacgg agcttcagga ggtgcaggag catcaaacgg ggggatcctc 480
tagagtcgac ctgcangcat gcaagcttgg cactggccgt cgttttacaa cgtcgtgact 540
gggaaaaccc tggcgttacc caacttaatc gccttgccagc acatnccctt tttcgccagc 600
tnggggtaat ancgaanag gccccgcacc gatcgcct 638
```

<210> 963

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 963

```
ccacccagtg gttacacaga t 21
```

<210> 964

<211> 20

<212> DNA

<213> Oreochromis niloticus

<400> 964

```
ccattaggtg aatggcatga 20
```

<210> 965

<211> 550

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 462, 524, 526

<223> n = A,T,C or G

<400> 965

```
aagagcatct ggcaatgaga acgaatacaa ctgggcttta gactgcagcc agtctccatt 60
tatcagaacc aatatgtgag ctgctaaagc ctgagagAAC cggagaacgg ctgaagaagt 120
cacagagcat aatgcataga gtgagatgga gtgctatgca ccctgctgcy tactgagaca 180
atcacactgt aattacactt atggcgctgt tgagatggac ctataatcac ctaatcatat 240
cgatcaaacc cacacagcgc tctgactcgc gcaaacagct gaaagactga aagattttta 300
gagatgaaag acatttttcag atatgcacac acacacacac acacacacac acacacacac 360
acacacacac atcgcgctgt tttgtcagtt tggtcaccca ttaacaaaaa aagcccagct 420
cacagctcgt caacgcatac tgagggctat atgtgcttcc gnacgcgcat accgcccagc 480
cgcacacaag ccctacacat tcacaccgga cgagattaca acangngcca ggtcgcctgt 540
gcgtctccac 550
```

<210> 966
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 966
 acttatggcg cgtgtgagat 20

<210> 967
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 967
 tgggtgacca aactgacaaa 20

<210> 968
 <211> 643
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 1, 5, 6, 7, 8, 9, 11, 12, 13, 16, 21, 24, 25, 32, 33, 40,
 62, 497, 504, 512, 546, 559, 577, 579, 584, 585, 635, 643
 <223> n = A,T,C or G

<400> 968
 ngggnnnnng nnaantttct nttntttgaa gnn gatcttn ttggaatacc cggcccccttc 60
 tngagggtcga cggatatcgat aagcttgata tcgaattcct gcagccccca agactggaga 120
 tgctgtcagt cagagtaaca gcgcatgaat aattgctttc ataaaaactgt tgcgctccag 180
 ttggttcgtc ggcgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgag aagtggaaaa 240
 aaaaactctc taaagatcaa tagggacatg gcgttaaact agtttgtcat taaaacggga 300
 cagtccccag aacttaaaat caaatTTggc ataagtttgg cttgaagtct gaactagctt 360
 gactgaaggT ttctcatgca gccgtcatgt ttgtgcggtt tgtagggggg ggatccacta 420
 gttctagagc ggccgccacc gcggtggagc tccaattcgc cctatagtga gtcgtattac 480
 gcgcgctcac tggccgncgt ttanaacgTc gngactggga aaaccctggg cgttacccaa 540
 cttaancgcc ttgcagcana tccccctttt cgccagntng gcgnnaatag cgaaaaaggc 600
 cccgcaccga tcggccttcc caaacagttg cgcanccttg aan 643

<210> 969
 <211> 17
 <212> DNA
 <213> Oreochromis niloticus

<400> 969
 tgcgctccag ttggttc 17

<210> 970
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 970
 taacgccatg tccctattga t 21

<210> 971
 <211> 486
 <212> DNA
 <213> *Oreochromis niloticus*

```
<400> 971
tggataagct ttgttcaaat aagatatatc ttctgtcaca ttagacaaaa tctaactctga 60
cagatgatac gtgtcgggtcc ggctcttcaa gcaactaaaa gcatgaagct ggaatccaat 120
ctttcaaatg cagattcatt tgaggcggat tagagaacga gtgactcagg aagtgtgctg 180
gtgtgctgtc atgccccgtg tgtgtgtgta catgtgataa agttgtggtg tgactaagtt 240
ctgacagtct gccagggtct gaaacgtctg ccatcgatcc taatttggca gcagatcctc 300
tgactacaat aggctctcca atctgtctaca gtcactctta ctgggtggga ccaagacaca 360
cacacacaca cacacacaca cacacacaca cacacacaca cagagacttg 420
gcttaccaaa ccagaaagga aacagacggg acagagagag cagccttgac aaaacaacct 480
ttacac                                     486
```

<210> 972
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

```
<400> 972
cgtctgccat cgatccta                                20
```

<210> 973
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

```
<400> 973
caaggctggg ctctctgtcc                                20
```

<210> 974
 <211> 624
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 19, 23, 539, 567, 619
 <223> n = A,T,C or G

```
<400> 974
ttgaatccct tgcatccnc gngggcggcc gctctagaac tagtggatcc ccccccttg 60
aggaaaatta tttgccaca actgctctaa tggattcaga cgatcctc agctttcatc 120
tgttacgttg acttttgtcg tgtggcattt tctatatata tttccacttc ataaaaattct 180
gcgttactac ccctgtccac caggctgtgc tgtttctact tgctgtcaca acaacaacaa 240
cctgctgatt gctgtgctca acagtcatgc gcacctaat ggatgtatcg aacaagcgtt 300
taatacccaa ctgtttgtgt gtgtgtgtgt gtgtgtgtca gggggatgtg taagcagctc 360
cgtttcagag tgaaaggaaa atggatggaa atgatatact ctgttcttaa ttctgtcttt 420
ttaatgataa agctgggtttc tttgatttta gccaaactggg tcagaatggg cagtacggac 480
ttgagactga ggtgggctgc aggaattcga tatcaagctt atcgataccg tcgacctcna 540
ggggggggccc ggtacccagc tttttgntcc cttttgtgag ggtaattgc ccccttggcg 600
taatcatggc catagctgnt tccc                                     624
```

<210> 975
 <211> 18

<212> DNA
 <213> Oreochromis niloticus

<400> 975
 gcgttactac ccctgtcc 18

<210> 976
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 976
 ttggctaaaa tcaaagaaac c 21

<210> 977
 <211> 486
 <212> DNA
 <213> Oreochromis niloticus

<400> 977
 tggataagct ttgttcaaata aagatatatc ttctgtcaca ttagacaaaa tctaattctga 60
 cagatgatac gtgtcgggtcc ggctcttcaa gcaactaaaa gcatgaagct ggaatccaat 120
 ctttcaaatac cagattcatt tgaggcggat tagagaacga gtgactcagg aagtgtgctg 180
 gtgtgcgtgc atgccccgtg tgtgtgtgta catgtgataa agttgtgggtg tgactaagtt 240
 ctgacagtct gccagggtctg gaaacgtctg ccatacgatcc taatttggca gcagatcctc 300
 tgactacaat aggtctctcca atctgctaca gtcactctta ctgggtggga ccaagacaca 360
 cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca cagagacttg 420
 gcttaccaaaa ccagaaagga aacagacggg acagagagac cagccttgac aaaacaacct 480
 ttacac 486

<210> 978
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 978
 cgtctgccat cgatcctaata 20

<210> 979
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 979
 caaggctggg ctctctgtcc 20

<210> 980
 <211> 465
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 1, 3, 6, 7, 9, 12, 16, 19, 29, 43, 45
 <223> n = A,T,C or G

<400> 980

```

ntngcnnanc tnacgnaanc accccactnt ttaggaaccc cancngactt caccgtgtgc 60
tgggtgtttgt gtgcacatga tcttccacaa ttgaaatgct tgcacgtatg tgtataaata 120
gaaaatgtcg aaatgtgatg tctctgtgag tgtgtgcttc tgatgcggca gtgtgcatgt 180
gtgagcttgt tctctggctc atttgcatat ctacgtctca tcacgttgcc aagacaacct 240
catctgttca tctgggaggg caggaaataa agcgatgggtg caaacacagt gaaagagaga 300
catgcgcaac acacacacac acacacacac acacacataa atacagacac acacacaaat 360
gcatgcatac aggttcattt aataacagcg cttacaaatg aattatttcc attggtagag 420
atttaataag ttacttgggtt ttcacggacc tcagagataa attgg 465

```

<210> 981

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 981

atctgggagg gcaggaaata 20

<210> 982

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 982

ctctgaggtc cgtgaaaacc 20

<210> 983

<211> 786

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 2, 3, 4, 6, 10, 26, 655, 665, 680, 683, 709, 730, 732, 735,
740, 777, 784

<223> n = A,T,C or G

<400> 983

```

tnnntnttgn ctttgaagcc cttccnggcc ccctcgaggt cgacgggtatc gataagcttg 60
atatcgaatt cctgcagccc ccacgtggct aatcgaagaa cagtcctatt tgatattgga 120
aagaatagac tgatctaaaa ctgggacaaa cactagcaca gaaaaaaatg agcacctata 180
catcagtgtg tcaatggaac agagtttcga ctgcacaaaa acaaaacaac tgaagcaaca 240
aagaaataac cagtgtatcac cagtgtgatc tgcaatagtg ggctaactga cggagtaaag 300
ggggcgtaa agacagaaaa tggacacagc agcagcaaca aaacgcttct aaaatcagat 360
cagaggtaga agaaaaaccc ttttactctg ctgatgatta catcaaagtg attatgagaa 420
tatgtgagga gcacatttga gacggtccta atcaaccgcg cagattagga cgataatagg 480
aaaaacaagt aaagaggtgg aaaggggtgag aggaaaatta gagttttgtt aaagtaatac 540
acacacacac acacacacac acacacacac acacacacac acacgcacac acacacacac 600
acacacacac ttttcaacca ccgccgttgg ggagtctacc actttatctg gttgncaaac 660
aaatnggttg acttatggan aanttctgag cctggggaat tttgttcgng ccccttaatt 720
tgatgggggn cncnnaaaan tttttggcag cttttattaa catttcgctt gcttaanggg 780
gccncg 786

```

<210> 984

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 984
caagtaaaga ggtggaaagg

20

<210> 985
<211> 21
<212> DNA
<213> *Oreochromis niloticus*

<400> 985
agcaagcgaa atgtaataaa a

21

<210> 986
<211> 754
<212> DNA
<213> *Oreochromis niloticus*

<220>
<221> misc_feature
<222> 3, 4, 5, 8, 9, 10, 12, 15, 32, 40, 48, 51, 53, 60, 101,
435, 496, 498, 513, 515, 531, 539, 556, 557, 562, 564, 571, 572, 574,
576, 593, 609, 610, 616, 617, 623, 624, 625, 640, 641, 645, 658, 670, 671, 672,
674, 675, 678, 702, 703
<223> n = A,T,C or G

<221> misc_feature
<222> 739, 742
<223> n = A,T,C or G

<400> 986
ttnnnntnnn tnctnagtag attctcttgg angggcccn tccttttngg ntnacggtan 60
ccgataagct tgatatcgaa ttctgcagc ccactgtagg ntgcattaac agccacagat 120
gtcagggtatc ccggtccaga cacggtcgtc agcagttcag ctataaacca gccatacaca 180
ttccttcctt ccctgtctcc caccagctga gcatttctct cacacacaca cacacacaca 240
cacacacaca cacacacaca cacacacaca cacacgggga caggctagaa ttaaaactcc 300
aggggtgtcc aatgagaaac cttcatgatt ggacatcagt agaggcagaa attcaaactg 360
tgaaccaatc agattgtgtg tcccgtttgc ttcccccttc aacaccttat tagggcgacc 420
ttccatgtct ctcanatttt ccggtcttgt tgggggttggc accccgggta aaaggaatgg 480
tcaatcaagc cacttntngg gggggaatcc cancnttggg ttcttaagga naccggggnc 540
cgggcaaaaa ccgggnnggg gntnggggaa nncntntcca aaaattttcg ggnccccttt 600
atttaagggn gggaannttt ccnnnaattt ttaaccgcgn nggcnggcct tttaaacntg 660
ggggccccgn nntnnggntt tttttaacca aaaccggttt cnnttggaac ctttgggggg 720
aaaaaaaaac ccccttngn gncggtttta accc 754

<210> 987
<211> 18
<212> DNA
<213> *Oreochromis niloticus*

<400> 987
ggtccagaca cggtcgtc

18

<210> 988
<211> 21
<212> DNA
<213> *Oreochromis niloticus*

<400> 988

atggaaggctc gccctaataa g 21

<210> 989

<211> 329

<212> DNA

<213> *Oreochromis niloticus*

<400> 989

```

agggtggcta ttaacaaggc aatctaagct tgaacttcaa ctaaacacat gcatttttct 60
gctatacgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg 120
tgtgaggctg aagagctttt ttttaacca catagctgct ctctttcaga tcctgtactg 180
attacacgtc accattctgt gacctaacac tgattgcctt aatcttgctt taacatcaga 240
tttaacagta taaccataga aaataggact aggacatagg actaactgtt caaacctta 300
tttttcccc tcctccagcg ctcggaagc 329

```

<210> 990

<211> 22

<212> DNA

<213> *Oreochromis niloticus*

<400> 990

ggtggctatt aacaaggcaa tc 22

<210> 991

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 991

ggtcacagaa tggtgacgtg 20

<210> 992

<211> 791

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 1, 10, 12, 13, 19, 23, 28, 44, 517, 593, 632, 667, 670,
689, 697, 708, 711, 712, 713, 734, 735, 752, 764, 774

<223> n = A,T,C or G

<400> 992

```

nttcttcctn anngagctnc ttngaaantt cccctcgagg tttnggggtat cgatccgctt 60
gatatcgaat tcctgcagcc caaaaatagg atttagaata gcaaacttta taaactttct 120
gtaataatat gtatattttt ttaagtaaaa tacactgtgg cttctaattt ggcacaaata 180
gaatgtttgc tttgttgaga aagggtcaaac acacagacac acacacacac acacacacac 240
acacacacac acacacacac acacacacac gtacaaaaga cattgtgatt tgtgtatcaa 300
ctgcaaggca acctgctgct gcccccaaat tactctgtgg cagggtgtaaa aaatttgccc 360
tgtgagagca ctacacacag gttgattgca cacctgcttt gctattttac aggtgctgtt 420
tgtgctagcg aagactgcgg ctccctcccg aggcaacccc acaccacccc agtttcacgc 480
caataagtcc tgtgcctgcc agcatgacag aaacctnatc atgctaatac aaatgctaac 540
tgaatcagcc atagaactgc attggtttct gctgttttgc ttgcactgac aanggttcta 600
gcttatcatt ttgcccttgc ctgaaatggg antgaataat taaagcagtt ggggttaaaat 660
attgaanttn ggggggggat ccacttagnt tttagancgg ccgccacngg nnntggagct 720
ccaatttcgc cctnnagggg agttcgtttt angcgcgcta atgntcgctg ttnnacaacg 780
ttgtgacctg g 791

```

<210> 993
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 993
 gtaaaaataca ctgtggcttc t 21

<210> 994
 <211> 19
 <212> DNA
 <213> Oreochromis niloticus

<400> 994
 agcacctgta aaatagcaa 19

<210> 995
 <211> 569
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 8, 9, 533, 534, 543, 550, 552, 553, 568, 569
 <223> n = A,T,C or G

<400> 995
 tgcattcnnt tgctccccgc ggtggcggcc gctctagaac tagtggatcc cccccctctc 60
 tctctggggc aagagtcctt cacatgaaag cagaaaagcc acacgtgcgc gcgcgcacac 120
 acacacacac acacacacac acacacacac acacacacac caccctttaa 180
 ccctctcatt agtgtaatcc tgcattgagaa cagttaaattg tcatgaataa atccacttag 240
 aagtcagcga atgaaagact ttcactttga gttggttgca ttaccatttc aataagcgtg 300
 ccacgtgca aaacgttggc agtgtttgac agagtaattg ggaacattaa cgagtagata 360
 aaatgtggta agcggaggga ggcgtccgtg taagtgggct gcaggaattc gatatacaagc 420
 ttatcgatac cgtcgacctc gagggggggc ccggtaccca gcttttggtt ccttttagtga 480
 ggggttaatt gcccgcttgg cggtaatcat tggcatagct ggtttcctgg ggnnaaatgg 540
 tantccggtg annaattccc cacaaaann 569

<210> 996
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 996
 gtccttcaca tgaaagcaga a 21

<210> 997
 <211> 18
 <212> DNA
 <213> Oreochromis niloticus

<400> 997
 cctccctccg cttaccac 18

<210> 998
 <211> 163

<212> DNA

<213> *Oreochromis niloticus*

<400> 998

```
caagcagcta ctcatgtgag accacactga ctcaatgggt gcttatgtct tctgtgtgtg 60
tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tctgttgaaa gtctcccaca 120
cactcccttg tctttgcata gaccagaggt tcccaaagtg tgg 163
```

<210> 999

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 999

```
gcagctactc atgtgagacc 20
```

<210> 1000

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1000

```
tgggaaacctc tgggtctatgc 20
```

<210> 1001

<211> 789

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 2, 3, 4, 5, 16, 19, 25, 33, 40, 653, 662, 665, 667, 683,
705, 712, 736, 740, 773

<223> n = A,T,C or G

<400> 1001

```
tnnnnnttttt gactangtna ttgcnctttg aangcggccn cggccgctct agaactagtg 60
gatcccccat cgcgtcagca ggacaggcag ccatttctgg agctcgtcct atcttttagaa 120
cagaaaactgt gctgataaca gagcttccac agcagctaaa tacacagctt atcccacaac 180
acacacacac acacacacac acacacacac actagtgtta catgtgtagg ctgttttttc 240
cccacatgca aatagcggggc tggtttcggg aggcgattca ctttcaacat catttagctg 300
cctgactgac cagtgagggg gctgcaggaa ttcgatatca agcttatcga taccgtcgac 360
ctcgaggggg ggcccgggtac ccagcttttg ttcccttttag tgaggggttaa ttgcgcgctt 420
ggcgtaatca tggtcatagc tgtttcctgt gtgaaattgt tatccgctca caattccaca 480
caacatacga gccggaagca taaagtgtaa agcctggggg gcctaagag tgagctaact 540
cacattaatt gcgttgcgct cactgcccgc ttccagtcgg gaaacctgtc gtgccagctg 600
cattaatgaa tcggccaacg cgcggggaga ggcggtttgc gtattgggag ctnttttcgct 660
tnctngntta attgactcgc tgnngctcggc cgttcggctg cggcnagcgg tntagcttac 720
tcaaaggcgg gaaacngttn ttcacagaat caggggatac cccaggaaaag acntttttgag 780
ccaaaggcc 789
```

<210> 1002

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1002

gctcgtccta tctttagaac a 21

<210> 1003
 <211> 16
 <212> DNA
 <213> Oreochromis niloticus

<400> 1003
 aaaccagccc gctatt 16

<210> 1004
 <211> 267
 <212> DNA
 <213> Oreochromis niloticus

<400> 1004
 cacagcaacc tgagacgagc gggctctcatc agccaaatcc cactgagcaa acaagacacg 60
 atctcgcttt tctgctgaga acaatctgac ctgcatgaaa tgtgatcagc tggagattca 120
 ccgcagtact gcagtgtctgc aacacacaca cacacacaca cacacacaca cacacacaca 180
 ctaaccctga cattttttaac acttagtgcg ttacttcaag ctcattttta atcatgaact 240
 taacgagtta ccttacggcg ggcgggg 267

<210> 1005
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1005
 acacgatctc gcttttctgc 20

<210> 1006
 <211> 19
 <212> DNA
 <213> Oreochromis niloticus

<400> 1006
 ccgccgtaag gtaactcgt 19

<210> 1007
 <211> 510
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 294
 <223> n = A,T,C or G

<400> 1007
 gtgatggaga tgttggtgtt ttgtacggag cagatgtact cgccgctgtc gttgtggctg 60
 acatcggaca gcttgagggt cccgttggtc agaattggaga tacgaggata cagcagaggg 120
 tccgacagca gagcacctgt gtcctcccggt tccttgacagg caacacacac acacacacac 180
 acacacacac acacacacac acacacacac acacacacac acacacacac acacacacac 240
 acacagagca gagatattga tcgttacata tgccaatcgg ctctgtgtct ccanaatcat 300
 tgcagactta ttctaacatc agattgcaga ataagatccc aggaactgga tcaatggaag 360
 tgtgtatcct cgccgatcgg tgacttgata acagacacaa agggatcaat aaatgatgag 420
 agagcagaaa gaacagctgt aatttctaag gggggatcct ctagagtcga cctgcaggca 480

tgcaagcttg gcactggccc gtcgttttac 510

<210> 1008
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1008
 ccgttggtca gaatggagat 20

<210> 1009
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1009
 ccgattggca tatgtaacga 20

<210> 1010
 <211> 606
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 2, 3, 5, 15, 17, 19, 28, 33, 578
 <223> n = A,T,C or G

<400> 1010
 tnntnttttg acaantnanc tcttgganac ccngccccct ctcgaggctcg acggtatcga 60
 taagcttgat atcgaattcc tgcagcccc tcatcccatt ccttgctttg tgattctaag 120
 ccccgccac aatagttttt acctgtgttt aactattttt agacgtgtgt gtgtgtgtgt 180
 gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtcagattgt ctcccttagt gtttcttagg 240
 tttgaattgt ccaataatct cagcttttgc tgcctttgtg accttttttt gtttcctctc 300
 ttcagcttga tgtaacaatt ttagttaact gaaaatgac tggttttctg atgtgcttac 360
 aaaaataaaaa ttaaaaaatat acattactta aaactaaaag tagggaatat ctttttttta 420
 attaggtaaa atttgtcaaa atatccagcc tgaagagact ttgatgcaaa tgtttattgg 480
 aaagtgggat gcctgcatca ctgtaagtca ggtggggggg atccacctag ttctagagcg 540
 gccgccaccc gcggtggagc tccaattcgc ctataggnga gtcgtattac cccgctcact 600
 ggcccc 606

<210> 1011
 <211> 17
 <212> DNA
 <213> Oreochromis niloticus

<400> 1011
 agccccgcc acaatag 17

<210> 1012
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1012
 aaaggtcaca aaggcagcaa a 21

<210> 1013
 <211> 345
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1013
 tattttacaca gccaggagac aaatagaaac atcatcattt atcagttttc tgggtctaata 60
 agaaacacac acacacacac acacacacac acacacacac acacacacac acacacacac 120
 acacacacac agagtaatgg ctttaaaaaa gttctttaa atgaatagta tgggtggagat 180
 gtatgtaaat gaggcaactt ggactaacag tgcaaaacag gacagtcatt tctgtggaaa 240
 taagcttcag ggatttcctt gctggctctc ggatgggcta aaaatcagct tgcgtgtgac 300
 tttaatggag tgcagctctc acacagtaaa gccccgaagc agtaa 345

<210> 1014
 <211> 22
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1014
 cacagccagg agacaaatag aa 22

<210> 1015
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1015
 tgactgtcct gttttgcact g 21

<210> 1016
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1016
 caacaggatt atggaacagg 20

<210> 1017
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1017
 gtatgcggat tgcattgttg 20

<210> 1018
 <211> 351
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1018
 atctgttgtc tgtgacatcc attttgcaat gtggcgccag ccaaaatgct aaactgtttc 60
 ctaataattc ttatcctgac actgatttct ttttttaa attgctta atataaaaa 120
 aaatacacc acacacacac acacacacac acacactgtc ctgagcacat atgttatctg 180
 acatggactg ctgtcccggc atgggacagc agtctagtta ataagtataa accccatcca 240
 tccaacaaac ataattcaga tcccatgatg tttttattac acacagccat agacctttcc 300
 cctgaattat ttccaccagt cactgaatta aagatcatat aggcattagg a 351

<210> 1019
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1019
 tgtctgtgac atccatttttg c 21

<210> 1020
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1020
 ggacagcagt ccatgtcaga 20

<210> 1021
 <211> 287
 <212> DNA
 <213> Oreochromis niloticus

<400> 1021
 cccattaata gctctttgtg tattggtgtg tacttgtatg ttgtgcatgt gtttgcggtg 60
 gcatgcatgt gggttctgac atggattgga gcagctaatac acaccattaa tcacagcgca 120
 ggaccaaagt gacacttttc gtctccccac acctccagtg tttttccttt taatgctcac 180
 tgtaatggga acacacacac acacacacac acacacacac acacacctac ataagacttg 240
 taccagagca agtgccttag actgcaggct tatttttctt gagttgg 287

<210> 1022
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1022
 ttctgacatg gattggagca 20

<210> 1023
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1023
 agcctgcagt ctaaggcact 20

<210> 1024
 <211> 608
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 1, 3, 7, 12, 13, 14, 17, 18, 19, 20, 26, 29, 32, 90, 501,
 579
 <223> n = A,T,C or G

<400> 1024

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ntnttgntcc tnnngannnn tttggnatnc cngccccctt tcgaggtcga cggatcgcg 60
aagcttgata tcgaattcct gcagccccc n gcagacagca gcagctggag tgggacgact 120
ccaccctcac ctactaaaca cacacaagac acccaaacia gagctcccga cacacacatc 180
agaaactcac tcatactccc tccctcacac acacacacac acacacacac acacacacac 240
acacacacac tctctctctc acacatgcag cactccctgc agtttcatgt ctaggagcca 300
tgatgtaaaa acttaacaaa aataaaaataa aaaaaatcaa gaaaaggaga aacataaagt 360
cccttcagcg tatatatggg caagggttttc ctgttggttat cttaagtggg ggtccatata 420
gaattcagca tttccatgct ggggaaatag gttttgcagc tgtttgagct aagattttca 480
agttattcac aaaatgaaga nccataatgt gtgtcaggcg aagaactcca ttcaaattggc 540
atgtaatagc cagaaaccgc actgtttcgc cgaaatatng cgattttacc caggtcctta 600
aggccgggt                                     608

```

<210> 1025

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1025

actccaccct cacctactaa 20

<210> 1026

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1026

agggacttta tgttttctcct t 21

<210> 1027

<211> 441

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 285

<223> n = A,T,C or G

<400> 1027

```

gccatccgc ctccacacac acacacacac acacatacac acacacacac acacacacac 60
acacacacac acacatgctg cgaggtaacg gcagacaggc gcgtgactca ttaggcattc 120
gtccccagg gagatcgctg ggggggcgcg tgcgaggag agagagcgcc gcagctgcag 180
gaatgtcacg ggcggcttct gctctgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgct 240
tgctaattgct ggttgagacc aacggcgggg cactgcacct ttcangaaat aacgcattga 300
gaaaggaggag gaaaaaaagg gaaaaaaaca tacttattag ttctcttttc caccaagtgc 360
ttatttataa gtctaaaatg aatttagaga gaaaacatta gattgcctta taatttctgc 420
tttaattaga atgcttttgc t                                     441

```

<210> 1028

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1028

cgtagctcat taggcattcg 20

<210> 1029

<211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1029
 ttttcctccc ctttctccat 20

<210> 1030
 <211> 783
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 26, 34, 628, 632, 642, 747, 760, 776, 779
 <223> n = A,T,C or G

<400> 1030
 gacttttgatt gccttttgacc gcggcngcgg ccgntctaga actagtggat cccccacaag 60
 agaggagtc agtgggcgtg gctgagctgg tttgctctgt ggtggagatg aaccttcatg 120
 acaaagcatg ccagtcccag tcattcctcca cagctgggag cgcttccctg gctcctgcac 180
 aataatccat gtatacagaa tgattatact ttttatcatt ttcctttctt ttttttcccc 240
 tctctctctc tctctcacac acacacacac acacacacac acacacacac acacacacac 300
 acacacagag gaaaagataa tggcaacagg ttttctgatc agcctgacac atgccccaaaa 360
 aacctttttt gtttcaaaat aaaacttgag ttgatggcaa gttttgctgc tgggttgcta 420
 ctttcatctg cacacagatg aatgcgttaa caaaattcca ggtagtattc aaagtgtggt 480
 attagcaaat tgaccatttt tgggctgcag gaattcgata tcaagcttat cgataccgctc 540
 gacctcgagg gggggccggt acccagcttt tggtccttta gtgaggggta attgcgccct 600
 tggccgtaat catgggcata gctggttnt gngtgaaatt gntattccgt cacaattcca 660
 cacaacatac gagccggaag cataaagggg taaagcctgg ggtggctaaa gagggggctt 720
 acctaacata atttgcggtg gcgcttnatg ggccgggttn cagtcgggaa acctgncgng 780
 gcc 783

<210> 1031
 <211> 17
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1031
 ccagtcccag tcattcct 17

<210> 1032
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1032
 agaaaacctg ttgccattat c 21

<210> 1033
 <211> 605
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 2, 3, 7, 14, 16, 20, 25, 33, 44, 82, 111, 472, 480, 509,

511, 520, 521, 541, 548, 563, 576, 588, 604, 605

<223> n = A,T,C or G

<400> 1033

```

tnnagancct cttngnaaan cccgnggtgt ttnggcgatc tacncctagt ggatccccca 60
aaaatctagg gcacccatt tnacactctg tgcttttatc aagtgcataa ngggataaac 120
aacaacagca agtttgccaa ctctccatta aagttgtgat tttagtgtgc ttttgggttt 180
gctctctctc tctctctctc tctctctctc tctctctctc tctcacacac acacacacac 240
acacacacac acacacacac acacacacac agagtgtaga aatgagtgac tgctgcactg 300
tttttgttgt tttttaccat aagcctttta gctttgactt tatcctgcc a ttgtagagc 360
tgtgaaagtg gctgaagaga caaaaatcta tctctcaggt ctgagggatc ttacggtctt 420
tggaataat tgatcagcag aactgacttg gagttaaaaa actgctctgt angaaagcan 480
caaggacatt tgtatccagt gggctgcang naattcggan ntcaagcttt atcgataccg 540
ncgacctnga gggggggccc ggnaccaac tttgtncct ttagagangg ttaattgcgc 600
gctnn 605

```

<210> 1034

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1034

```

atttttagtgt gcttttgggt 20

```

<210> 1035

<211> 19

<212> DNA

<213> *Oreochromis niloticus*

<400> 1035

```

aaaaacagtg cagcagtca 19

```

<210> 1036

<211> 618

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 8, 16, 546, 551, 618

<223> n = A,T,C or G

<400> 1036

```

tttgactncc ttgggnaccg cgccccccct cgaggtcgac ggtatcgata agcttgatat 60
cgaattcctg cagccccctt tggggctagc tagattgctt gactgctagc tagcacaaag 120
cagtgtagc ttagtgagga tgttttactt cctgctcttt atctcctcac ctgtgttcat 180
atatggtaaa agctaattcca tatagagggg tgaggggaga tgaccctttg tgatcagcag 240
gaagtcacac aaacgcaccc ccattcacac acactcactc actcacgtgc acgcacacac 300
acacacacac acacacacac acacacacag tgttttaacc ttttgtgacc atatgggtgt 360
tacaatgtgt ggcgcttgta ttcttagaat aaaaggctgt ttattggaag gtggctagga 420
gacaggtgag gagcattcag ctccagtagc tttggttccg gggggggatc cactagtctt 480
agagcggccg ccaccggcgg tggagctcca attcgcccta tagtgaggtc gtattacgcg 540
cgctcntggg nccgtcgttt acaaccgtcg tgactgggaa aaccctgggc gttaccaaac 600
ttaatcgctt tgcacacn 618

```

<210> 1037

<211> 21

<212> DNA
 <213> *Oreochromis niloticus*

<400> 1037
 tatagagggg tgaggggaga t 21

<210> 1038
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1038
 agaatacaag cgccacacat 20

<210> 1039
 <211> 430
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1039
 gacgtgattt ccatacaaat tactgttgtc atggtaactg gttgaaagag gtcattacct 60
 aggtgatatt ggtgacaaat gatgaaaggc tggcactgga ccaagtgtc ttcaacaaag 120
 gacaagtggc ttccacagag gtgtgtgtgt gtgtgtgtgt gtgtgtgtta cacatgcaga 180
 gagtgtcaat cagctagaca ggagcatgca cagccacaag caagtaatct gctgtagact 240
 tccatcatag gcgagtttag gcgagtgtc aagcgctct aaatttcac acagcacctc 300
 taaaaacaac tgtagtgatg gtaataatga tgatgtattt cagtattatc ttctgatatt 360
 gtcctctaatt gttctatttt ggaggatgaa aactgcccag tggtgttgat gtggtgatgt 420
 tgcagtgcgc 430

<210> 1040
 <211> 16
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1040
 aaaggctggc actgga 16

<210> 1041
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1041
 ctaaactcgc ctatgatgga a 21

<210> 1042
 <211> 223
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 138, 164, 185, 192, 204, 211
 <223> n = A,T,C or G

<400> 1042
 gctgtccagc tgtgtttccc ttgtgagatt aattgccgag atagtgtgtg tgttttgcct 60

```

gtgtgtgtgtgt gtgtgtgtgtgt gtgttttggc tgtgtgtgtgt tgtgtgtgtgt tgtgtgtgtgt 120
tgtgtgtgtgt tgtgtgtgtgt ttgcagggtga gtttccagggt tagngcacac actgtgtgtgt 180
tgtangatat gngatattgc tgangaagca ntaaaaagag tgc 223

```

```

<210> 1043
<211> 21
<212> DNA
<213> Oreochromis niloticus

```

```

<400> 1043
agctgtgtgtt cccttgtgag a 21

```

```

<210> 1044
<211> 20
<212> DNA
<213> Oreochromis niloticus

```

```

<400> 1044
acctggaaac tcacctgcaa 20

```

```

<210> 1045
<211> 811
<212> DNA
<213> Oreochromis niloticus

```

```

<220>
<221> misc_feature
<222> 6, 7, 8, 15, 30, 37, 44, 599, 626, 627, 655, 662, 667, 687,
      689, 703, 722, 723, 726, 738, 744, 761, 765, 777, 786, 791, 795, 796,
799, 803, 807
<223> n = A,T,C or G

```

```

<400> 1045
tggtannncc ctctnngaatt ctcttttggan gcgggccnccg ccgntctaga actagtggat 60
cccccccagg acggacgagg tgctggcgaa gtcctgcctt agacctgggg gagcgagata 120
tgaggaccag cgtgcaaaac acccaccaca cacacacaca cacacacaca cacacacaca 180
cacacacaga cagtcatcac ctccctgggggt taatgaagct gaagtagcga tgggctctga 240
gatctggtgc catatgttaa attattagga cggggggggac agtagggaca gacagacgga 300
cagcaagaga agtcagttgg ctcaaatgac agagataacc ataaaaaaaaa gtgactaaac 360
agcaagaattg atttccactg tcctgaaatc atttcagaaa catctctctc tgtataaaga 420
ttcagattta tagtgcattc taagcactct ggcaggagga gcaaacaact aaccaacagt 480
ctacaactca aatcaaaaaat catgaagtgc agtcagggtg cagatggagg tcctgctact 540
tactctcctc ctgcagcccg ggggctgcag gaattcgata tcaagcttat cggttccgnc 600
gaccttgaag gggggcccg tcccannttt ggtccttttag ggagggttaa atgcnccttg 660
gngtaancat ggcataagctg tttccgngng aaaatgtttt ccngctcatt tcccccaaaa 720
tnntanccgg agcttttnta aagncggggg ggcctaaagg ngggngctta cccccantta 780
attggnggtg ngccnntgnc cnttttnacc t 811

```

```

<210> 1046
<211> 19
<212> DNA
<213> Oreochromis niloticus

```

```

<400> 1046
ggggagcgag atatgagga 19

```

```

<210> 1047

```

<211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1047
 ctgccagagt gcttagaatg c 21

<210> 1048
 <211> 436
 <212> DNA
 <213> Oreochromis niloticus

<400> 1048
 cccaggggtg ccgagcgcta acactgctga cctctagagc aggtcaccat gacagcgtgt 60
 gtgtgtatgt gcatttgatc ttgttgtttg gagcacaact gtacacgcgc cttcacgcaa 120
 taactcatct gcctgccctg gagaacagag tggctctgct atttctgctc agagtcatta 180
 tcatcacctg tacctcctct gtgactgccc cctttaactc cacaccgccc aagaatctct 240
 ctctctcaca cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca 300
 cacacacact gtcctgcagg tcagagccaa gtccaagagg catgggcttc attggcaggc 360
 agtgtgaata acaggaattg cagggaatac taagtccaaa acgggctgca cttttacact 420
 attgatagaa catggg 436

<210> 1049
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1049
 ccctggagaa cagagtgggtc 20

<210> 1050
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1050
 cttggacttg gctctgacct 20

<210> 1051
 <211> 634
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 3, 5, 7, 12, 13, 14, 22, 23, 35, 634
 <223> n = A,T,C or G

<400> 1051
 gngntnggt tnnnttggtg tnngatagtg atctnttggg accccccccc ttcgaggtcg 60
 acggtatcga taagcttgat atcgaattcc tgcagccccc aatccatgac tgacagtgac 120
 agactgactc tgtcttctct gcctgtgtct gttgtttttg tcctctgcaa caggacaaac 180
 tctctctctc catcacacac acacacacac acacacacac acacacacac acacacacac 240
 acacacacac acacacacac acacacacac gcacaattct gccactcatg tctcacaact 300
 tcaaaagaag caaatgagac aacaaattat tcagaaaagc gtttgctctg gtgataattt 360
 tctatcaaac caggcttggt tttgcaaata gattgcaaac agagtctgct ggggggggatc 420
 cactagttct agagcggccg ccaccgcggt ggagctccaa ttcgccctat agtgagtcgt 480

attacgcgcg ctcactggcc gtcgttttac aacgtcgtga ctgggaaaac cctgggcgtt 540
 acccaactta atcgcccttg agcacatccc cctttcgcca gctgggcgta atagcgaaga 600
 ggcccgacc gatcgccctt ccaacagttg cgc 634

<210> 1052
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1052
 tctctgcctg tgtctgttgt 20

<210> 1053
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1053
 gagcaaacgc ttttctgaat a 21

<210> 1054
 <211> 380
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1054
 ctgtggtgca tttgtgtttg ggtgagtctg aggggtgact gcttaagtaa aatatggtcc 60
 accctttctc tcgaatttaa cgtgctccac ctgtggaatg atgaggaaat ttctcaaatt 120
 attaccaaac cttttctgaa gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt 180
 gtgtgtgtgt gtgtgtgtta atttatgaga atgtaaaaaa acccaaccag ggggagcaca 240
 agccaacatg ctctgatgc tgatcccaaa catggataag atggggaagg ttacatcagg 300
 aagggcattc ggcacaaaac ctttgccaaa tcaaacatgc gggatcatcaaat gaatgagatt 360
 tttcagaact aatcagtcag 380

<210> 1055
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1055
 tccacctgtg gaatgatgag 20

<210> 1056
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1056
 catgtttggg atcagcatca 20

<210> 1057
 <211> 609
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature

<222> 2, 5, 8, 13, 21, 22, 27, 32, 36, 44, 70, 72, 93, 121, 139,
 151, 224, 443, 448, 451, 462, 468, 522, 530, 544, 555, 566, 574, 578,
 591, 594, 608, 609
 <223> n = A,T,C or G

<400> 1057
 tnatnttnaa cangaaaagc nnaaaaangac tnccncgaa ctgnngaaaa cccccagggg 60
 atcccccccn gngagtgatg gcgccccctt ttncacttc ctcccacagc atcctggggg 120
 ntcctccctc cctgctggng cccccacgg nggccatcac tctcctccac gctgaggtca 180
 cacacctctg atccactca cactcacgca gattcacaca cagnctctca cacacacaca 240
 cacacacaca cacacacaca cacacacaca cacacacact tttattcaca cactcact 300
 cacacacact cctattcaca cacacactgg tcatgaaagg aagtctctca gtaaatttag 360
 ataaaaaacg atttgagctt tgagtttggtg gtaaaaagag aaactctgag gatgtgcaga 420
 gaccagtgga gctgaaggct cgnatggncg ngatgtcgcg gngcgacncc gtcaccctgt 480
 aagggggctg caggaattcg atatcaagct tatcgatacc gncgacctcn agggggggcc 540
 cggnacccag ctttnggtcc ctttantgag gggnaatngc gcgcttggcg naancatggc 600
 atagctgnn 609

<210> 1058
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1058
 catccttcat catcctccct c 21

<210> 1059
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1059
 ccttcagctc actgggtctc 20

<210> 1060
 <211> 132
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1060
 cccacttggt gtttgagctt ggagtagtgc acacacacca cacacacaca cacacacaca 60
 cacacacaca cacacacaca gtcagctgaa tgcactttat cttttctgat caatgggtgcg 120
 ggattacaga gg 132

<210> 1061
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1061
 acttgggttt gagcttggag 20

<210> 1062
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1062
ctctgtaatc ccgcaccatt

20

<210> 1063
<211> 813
<212> DNA
<213> Oreochromis niloticus

<220>
<221> misc_feature
<222> 9, 12, 592, 608, 673, 714, 728, 738, 759, 761, 763, 790,
796, 809, 813
<223> n = A,T,C or G

<400> 1063
ttgcttgtna ancccttttg aagccccct cgaggtcgac ggtatcgata agcttgatat 60
cgaattcctg cagccccctg ctgtgcccac gtggagcctc aacgctcatt tcacaacacg 120
gactcagcgg ggatgcaaat gtgacgtcgt gcagccaaac tttcatcatg tgacgttttc 180
acaccgaaa tctgctacac acacacacac acacacacac acacacactc acagactcac 240
tactcacac acacacacac acacacactc acagactcac tactcacac acacacacac 300
acactgctgg cacgtgctc ggctgcgtcg ggggagaagc ggcgacgga cgggtcacc 360
agctcggttg gcagctcagc tccggggggg atccactagt tctagagcgg ccgccaccgc 420
ggtggagctc caattcgccc tatagtgagt cgtattacgc gcgctcactg gccgtcgttt 480
tacaacgtcg tgactgggaa aaccctggcg ttaccaact taatcgctt gcagcacatc 540
cccctttcgc cagctggcgt aatagcgaag aggccgcac cgatcggcct tncaacagtt 600
tgcgagcagc gaatggcgaa tggaaattgt aagcgtaaat attttggtta aattcggcgt 660
taaatTTTTT gtnaaatcag ctcatTTTTT aaaccaatag gccgaaaatt gggnaaaatc 720
cctTTTTTnaa ttcaaagnaa ttgaccgaga tagggttgna ntngttgttc caagTTTTtg 780
aacaagagag tccctnttta aggaacggng gcn 813

<210> 1064
<211> 21
<212> DNA
<213> Oreochromis niloticus

<400> 1064
tcgtgcagcc aaactttcat c

21

<210> 1065
<211> 16
<212> DNA
<213> Oreochromis niloticus

<400> 1065
cgacgcagcc gagcag

16

<210> 1066
<211> 654
<212> DNA
<213> Oreochromis niloticus

<220>
<221> misc_feature
<222> 4, 12, 13, 23, 29, 467, 477, 478, 491, 542, 564, 572, 585,
592, 602, 605, 621, 637, 646, 651
<223> n = A,T,C or G

```

<400> 1066
tttnatccct tnnattggcc ccncccttna ggtagcaggt ctcgataagc ttgatatcga 60
attcctgcag ccccggtatt gtgacaagga gccagaactc acaggatcga catagatcca 120
gcctgctctg tccatctgct ccaagcttca ttcccagcat atcaataccc catgtcacac 180
acacacacac acacacacac acacacacac acacacacac acacacacac acacagagca 240
ctctgtcacc tgcgacttct cctgggtccca tcactctccc accactccag cccttggtctg 300
caaagcctgc ttatgtttca tcctgacact tagagaaaat ccttgcttgt ctataagcgc 360
attcagcacc acacaaaagg aacggggggg gatccactag ttctagagcg gccgccaccg 420
cggtaggagct ccaattcgcc ctatagttag tcgtattacg cgcgctnact ggccgttngt 480
ttacaaccgt ngtgactggg aaaaccctgg cgttaccctaa cttaatcgcc ttgcagcaca 540
tncccccttt tcgccagctt ggcntaaata anccgaaaga ggccngcaac cngatcgggc 600
cntnccaaa cagttgcgca nccctgaatg gcgaatngga aattgntagg nggt 654

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<210> 1067
<211> 21
<212> DNA
<213> Oreochromis niloticus

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```

<400> 1067
attgtgacaa ggagccagaa c 21

```

```

<210> 1068
<211> 20
<212> DNA
<213> Oreochromis niloticus

```

```

<400> 1068
aagtcgcagg tgacagagtg 20

```

```

<210> 1069
<211> 598
<212> DNA
<213> Oreochromis niloticus

```

```

<220>
<221> misc_feature
<222> 6, 9, 11, 14, 32, 34, 36, 37, 44, 47, 52, 54, 60, 554, 581
<223> n = A,T,C or G

```

```

<400> 1069
ggaggnngnt nttngttcaa ggaggggaatt anantnnaca ctcnttngtt tngnatagan 60
ctagtggatc ccccgctcgg catctcccag cctcgtgcac agaaaaacac acatgcatgt 120
ttcagtaa at aagggacctc tategtcgca ggtagactga aggcgcacgc acacctgctc 180
atcta atgag agcactatca cctggactct cctgcctcaa ttagcctctg ttctctcttc 240
agcgagaa ac acacacacac acacacacac acacacacac acacacacac acacagaaag 300
accgagtcac tcaggtttat agtatacaca caatacactt ctgtcccaa gaggacttcg 360
ccactctacg ctctcctgca cagtgcagca ctcagctctt tagcagcatt aaatcaacag 420
ggggctgcag gaattcgata tcaagcttat cgataccgtc gacctcgagg gggggcccgg 480
taccagctt ttgttccctt tagtgagggt taattgcgcg cttggcgtaa tcatgggtcat 540
aagctgggtc ctgngtgaaa attgttatcc gctcacaatt ncacacaaca tacgagcc 598

```

```

<210> 1070
<211> 19
<212> DNA
<213> Oreochromis niloticus

```

```

<400> 1070

```

gtcgcaggta gactgaagg 19

<210> 1071
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1071
 tcttggggac agaagtgtat t 21

<210> 1072
 <211> 653
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 33, 596, 624
 <223> n = A,T,C or G

<400> 1072
 tttgatgcct ttggaaccac cgcggtgggt tgncgctcta gacctagtgg atcccccca 60
 tggacaccag aacaggaaaag tgatgaacac acacacacat ctacacacac actgactcag 120
 catgaagtga tacacacaca tgaacacatg tgaactcgtt gactgagtga gaaatgacac 180
 acacacctac accgaaaatgg tgattcattg agaagtgatc cacacacaaa atacacatgc 240
 agacgctcgt gcaatgaaga gtaatgcaca cacacatgct cgtgcaatga agaattgcttt 300
 gctaacaaat gcttatgctg atatgcaaaa tgctgcatac acacacacac acacacacac 360
 acacacacac agactctgtt acaagaagcc attgattaca cagaacgcat tttatgtcat 420
 ccagaggggca cattatgtgg gctgcaggaa ttcgatatca agcttatcga taccgtcgac 480
 ctcgagggggg ggccccggta cccagctttt tgttcccttt tagtggaggg gttaattgcg 540
 cgcttgggcg taatcatggt cataagctgt ttcccttggg tgaaaattgg ttattnccgc 600
 ttcacaattt ccacacaaca tacngagccc ggaagcattht aaaaggtgta aaa 653

<210> 1073
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1073
 ctctgtgcaat gaagagtaat g 21

<210> 1074
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1074
 gcgttctgtg taatcaatgg 20

<210> 1075
 <211> 284
 <212> DNA
 <213> Oreochromis niloticus

<400> 1075
 atctggacca acaaccatat tcaaagtcaa tgaaatcaac tttcttcctc attctgatgc 60
 aactctcagt ttgaagttca gcatgttggtc tggatcttgt ctagatgact acggaaagtg 120

tgaaaagtat acctaataaaa gtgtctggtg atgatttgca cacacacaca cacacacaca 180
 cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca 240
 cacacaagtg atcagtggac ctaagaacag accacagcaa caaa 284

<210> 1076
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1076
 cagcatgttg tctggatctt g 21

<210> 1077
 <211> 22
 <212> DNA
 <213> Oreochromis niloticus

<400> 1077
 tttgttgctg tggctctgttc tt 22

<210> 1078
 <211> 278
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 69
 <223> n = A,T,C or G

<400> 1078
 actgacacac aaaaaaaaagc caacggtctg aattgagatg aaaataactgc tgtggagggga 60
 gcgacgctna aaataaccagg cagggctgca attagtgggtg tgtgcgcgga gcagctgctg 120
 cggttcagag cactaagtgt ctctaattac tgctgcagag agtgtgtgtg tgtgtgtgtg 180
 tgtgtgtatg ctgatatgtg cagcccaac ccatgagggg tgcctctgc tgagtatctc 240
 tatttaacat gctctgtgtg tgtgtgagtg tgtgtgta 278

<210> 1079
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1079
 aaagccaacg gtctgaattg 20

<210> 1080
 <211> 19
 <212> DNA
 <213> Oreochromis niloticus

<400> 1080
 agcagaggac acccctcat 19

<210> 1081
 <211> 613
 <212> DNA
 <213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 3, 24, 27, 33, 49, 73, 360, 574, 597, 612

<223> n = A,T,C or G

<400> 1081

```
atnttgtaac atgaaaagat ttanaangaa ctnccccgcg tacttgggna aaaacccccca 60
ggggatcccc ccnggagtcg gttactgcac agtttttttg caagttgaga ggctactgtt 120
aaacctaacc acacacacac acacacacac acacacacgc acacgcacac acacacacac 180
acacacacac acacacacaa taagagcaga agcatgtgtt cctgagcatt gcagatatgt 240
aactggtaaa catgccaaact aagggtgtgg gttgttttca cattggctct gtgtgcatga 300
aggcggtttta atgacagctt ttgggctgca ggaattcgat atcaagctta tcgataccgn 360
cgacctcgag gggggggcccg gtaccagct tttgttcct ttagtgaggg ttaattgcgc 420
gcttggcgta atcatgggtca tagctgtttc ctgtgtgaaa ttgttatccg ctcacaattc 480
cacacaacat acgagccgga agcataaagt gtaaagcctg ggggtgcctaa tgagtgcgct 540
aactcacatt aattgcgttg cgctcactgc ccgntttcca gtcgggaaac ctggcgngcc 600
agctgcatta ana 613
```

<210> 1082

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1082

```
gcaagttgag aggtactgt 20
```

<210> 1083

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1083

```
aaacaaccca caaccttagt t 21
```

<210> 1084

<211> 617

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 6, 7, 9, 11, 12, 17, 20, 23, 27, 28, 29, 31, 32, 36, 44

<223> n = A,T,C or G

<400> 1084

```
agggtnntna nnttatnttn tanttgnmnt nnaatntgat gccnccccct ttcgaggtcg 60
acggtatcga taagcttgat atcgaattcc tgcagcccc gacattgtcg gtggacatta 120
acgccacact gtgcagtagt gaccttgaat taatttacag cacgatgctg ctgagccaag 180
acctcattca cacacacaca cacacacaca cacacacaca cacaaaaacg caaaacatcg 240
gcagcattgt ttccttcaga aaatgaggtc acgttaaaact acttccagtg ccatatatgg 300
gcaaaaacat catccaatac acacacagca gagtttacag aacacaccag tttgttattc 360
aaataaaaga tcaactgtga taagtcctaa gtgtctaatt tattagaaat gttcaaaacg 420
gagacaatta aatcgcatct tttgtgttta caatgtgaca acacaaacac cacttttgtc 480
tgcgtttgcc tggtccttta ggctcaggca gcagcattat gttggctctg tttgcttctt 540
tcagctttgc tccccagtc ttatccagtc catcatcctt tttccaacac gagccatctc 600
cctagcagcc aagccag 617
```

<210> 1085
 <211> 16
 <212> DNA
 <213> Oreochromis niloticus

<400> 1085
 tgctgctgag ccaaga 16

<210> 1086
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1086
 gtctccggtt tgaacatttc t 21

<210> 1087
 <211> 588
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 102, 469, 472, 492, 498, 507, 517, 526, 531, 547, 558, 561,
 582, 585
 <223> n = A,T,C or G

<400> 1087
 ttgatccctt gctcccggtt ggcgggccgct ctagaactag tggatccccc cccacctcgg 60
 ctgagcttag cccggcgcac tgcttttagc acacggcatt tncacgtgca tgtccctgcc 120
 acataccatg gcgtgcacgt caacacacca gcgcacacac acactctaca tggcagtggt 180
 atttactgag atgtatatat acattcacag gactgattac agccgctaag aagtgtatct 240
 caaactgtaa ataattcaac atagacaagc agcttggctc tgacctcaca cttgactcag 300
 cagaaacaca cacacacaca cacacacaag caaactgtag gttcagctaa tggatgttta 360
 caactgttca tttgtggatt agctgcttgt gcatgcagca ttttcgtctg caagaaggag 420
 aaaagtgggc tgcaggaatt cgatatcaaa gcttatcgat accgtcganc tngaaagggg 480
 gggcccgggt ancccagntt tttggtncct ttttaagngag gggttnaatt nccccgcttt 540
 ggccgtnatt caatgggnca ntaggcttgg tttccctggg gnggnaag 588

<210> 1088
 <211> 17
 <212> DNA
 <213> Oreochromis niloticus

<400> 1088
 ccaccatgcc atccaca 17

<210> 1089
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1089
 tgtcggtagg agccaaatac a 21

<210> 1090

<211> 612
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 2, 3, 4, 7, 9, 14, 20, 21, 26, 39, 43, 57
 <223> n = A,T,C or G

<400> 1090
 tnnntntnt cttngatagn natctnttgg aaaccccgnc ccntttcgag gtcgacngta 60
 tcgataagct tgatatacgaa ttcctgcagc cccctgaggg tttcttaagc cacatttatc 120
 tgctcgtttg tcaagcgaac tcatatatct aagtgcgaat aattgtttta accccctccc 180
 cacacacaca cacacacaca cacacacaca ccaaaacaaa caaacaacaa cgtgtgtgcc 240
 tgtttacatc tgtgatctaa tttcttctcg tctctgtgtg cactctctct gtcccagcgg 300
 tgtagtgtgt agtaagaggg ggggatccac tagttctaga gcggccgcca ccgcggtgga 360
 gctccaattc gccctatagt gagtcgtatt acgcgcgctc actggccgctc gttttacaac 420
 gtcgtgactg ggaaaaccct ggcgttaccc aacttaatcg ccttgcagca catccccctt 480
 tcgccagctg gcgtaatagc gaagaggccc gcaccgatcg cccttcccaa cagttgcgca 540
 gcctgaatgg cgaatggaaa ttgtaagcgt taatatcttg ttaaaattcg cgtaaattt 600
 ttggtaaatc ac 612

<210> 1091
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1091
 taaagccaca tttatctgct c 21

<210> 1092
 <211> 16
 <212> DNA
 <213> Oreochromis niloticus

<400> 1092
 ctacaccgct gggaca 16

<210> 1093
 <211> 241
 <212> DNA
 <213> Oreochromis niloticus

<400> 1093
 tctaaatgct ctaactgatc tgtacacaag agtacgttaa tgtacacaca cacacacaca 60
 cacacacaca caaattacag ggcaacaatt tgcatagcag tcaaatgtga gcgcacaccg 120
 agacgtttcc ccttacctgt gctgtagagc gtccgtgttt tcttcttcgg tgcagggtggc 180
 agcaggcagc tgtccacaga ctctatccct ggcagcagtg ggaagctgag ggctcgacct 240
 c 241

<210> 1094
 <211> 27
 <212> DNA
 <213> Oreochromis niloticus

<400> 1094
 aaatgctcta actgatctgt acacaag 27

<210> 1095
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1095
 ggacgctcta cagcacaggt 20

<210> 1096
 <211> 659
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 2, 3, 4, 5, 8, 9, 10, 12, 13, 14, 15, 19, 20, 35, 43, 532,
 643
 <223> n = A,T,C or G

<400> 1096
 gnnnnttnnn tnnnnctann gatccttttg aagcnccccg cgntggcggc cgctctagaa 60
 ctagtggatc cccccctgat gtgtcacaa gggtttgtcaa gatcacagca ggggtcccaa 120
 gagataatct cagtttttggg ttttgaggc agggcgtaaa agaggggtgtg tgtgttggtta 180
 ggctgctggc agctgacaga gatacacagc atgcacaaat agaaagtacg agaaagatga 240
 caatacgtcg aggtcacaca aacacgcgcg ctcgcacact gctcatgcaa atgcacacgc 300
 attcattcac gccttgatgg caccatctgc cctctcctgc agcctctctg taagcctgga 360
 tgcaaaactgt tgcttataat atcatacctg ctgagtaata tgcacacgca cacacacaca 420
 cgcattgcata tggacacaca cacttacata tgctcaaaca gcagtgaaaa agttgtaagt 480
 agtttgacag aaaaagatca ggaatatgaa aaacgcacgc acacacacac tnacacacac 540
 acacacacac acacacacac acttacacac acacacacgc acacacacac ttacacacac 600
 acacacacac acacacacac acacacacac acacacacac acnacgtgtt cttgatcct 659

<210> 1097
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1097
 agccccttaa tgagatcaaa g 21

<210> 1098
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1098
 cctctctgta agcctggatg 20

<210> 1099
 <211> 665
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 3, 19, 20, 32, 39, 498, 551, 552, 571, 610, 655, 656, 665,

<223> n = A,T,C or G

<400> 1099

```

ttngatccct tgaacgccnn tccttttaggt cnacgggtcnc gataagcttg atatcgaatt 60
cctgcagccc atcgctgtgt atttctatca cagaggacag tgtttaccat cactctctgt 120
ttcccttaat ctgaaacggt atttgcatct ttctcaagg gatgactcgg tcgtgtctcc 180
ctctgcttca gtgagttaga gaagtgtgtg tgtgtgtgtg tgtgtgtgcg tgcgtgtgtg 240
tgtgtgtgca tttctgcatg tgtgtctgcc gtcctctttt aattaccgtc tctttttctc 300
tgcaccattg ctaaacttcc tccacagggt cctgctgggtg tctgagtgtg tgggcaacat 360
gccaatgaca gtcttttcat ttcacagaat aggggtggcat ggtagtgcag tggttacccc 420
tgtctcctca cagcaagtcg gtcccacgtt tgaatcctgg acggcgcac tctgcgtgga 480
ctttgctccg ggttcttntc gcagtccaaa cacatgcagt tagctgagaa ttcgaactga 540
ctgtgcgtgt nncacgatct tatagccccg ngttgggtgtc ttactgcata tcttaataat 600
gttagtgctn aggtgctttt taccctaaca attcacatct cgcttcttt tccgnncatc 660
aagan

```

<210> 1100

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1100

atcgctgtgt atttctatca c 21

<210> 1101

<211> 17

<212> DNA

<213> *Oreochromis niloticus*

<400> 1101

atgccaccct attctgt 17

<210> 1102

<211> 408

<212> DNA

<213> *Oreochromis niloticus*

<400> 1102

```

cccagttcat attaccatca agttgggtgct ccacaaacac tttcacagaa gcacatacag 60
aatagcgcac tgttgcattht gcatgaagac aagttcatca gttcctcaac ctctcccgac 120
cccctctgat ttcttgccca gccactccta ttacctgcag aaacaggaaa atgggttatac 180
atcctccata catctacagt ggtgggtggt tgccatgcag taaatggctg gaatattaaa 240
tgagtttatt ggatgcttct atacaggcgc cgctgcagaa ataggactga attatacata 300
gatttagaga tgtgtgtgtg tgtgtgtgtg tgtgtggagt gggaaaatag ggggagagaa 360
aaacaaagca gcaaagggtc atgtagaatc agctgtcaat tatgctgg 408

```

<210> 1103

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1103

catgcagtaa atggctggaa 20

<210> 1104

<211> 22

<212> DNA

<213> Oreochromis niloticus

<400> 1104

ccagcataat tgacagctga tt 22

<210> 1105

<211> 471

<212> DNA

<213> Oreochromis niloticus

<400> 1105

cccaaggaca aataaatata tcccgtgtat ttagttattt atagacacgc gtgcgtgtgc 60
gtgtgttctg tctgtcatga gtaagagact attacacctc tcggaaaact gggacgcggt 120
acatgcbgagt gcctgtggag atgtacaaaa gaggagaaga gccacacaca cacacacaca 180
cacacacact cacaggaata attaataaat attgtttcca ttagcaagcc ggagaaggaa 240
gacactgcac cataattagg agacactgca gagctgcaac ctctctcat caagcagtaa 300
atcaagatgt acacacacac actcacacac acacacacac tgcaggcttt tttttttttt 360
tttttgcatt acctctcttc atgacagatt ctaaatgacc acaaatgact caggaatgga 420
cgttttgtta tgtcatcaaa ggcaaaaaaa gacactaagg gtagggcagg g 471

<210> 1106

<211> 20

<212> DNA

<213> Oreochromis niloticus

<400> 1106

cgagtgcctg tggagatgta 20

<210> 1107

<211> 22

<212> DNA

<213> Oreochromis niloticus

<400> 1107

ctgtcatgaa gagaggatcat gc 22

<210> 1108

<211> 669

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 6, 12, 14, 506, 534, 538, 539, 544, 564, 565, 577, 580,
587, 621, 628, 634, 658, 663, 666, 668, 669

<223> n = A,T,C or G

<400> 1108

tttganattc cntnggcact ggcccccccc tcgagggtcga cggatatgat aagcttgata 60
tcgaattcct gcagccccca taataaacct tccacatagt tacctgttct gtttccacca 120
tatccctgtc tcacacacac acacacacac acacacacac acacacacac acacacacac 180
tacttaacac actggaactt ccagaccgac ccagtcattgt tttattgaag tctcctttat 240
ttgtttgctt ggatcagcga ctttttaggta ttttgttttt ttacttagtc atttttatta 300
cttttttttt tttttttttt ttgctttggg cagccatctt ggcagtaatg gctggcatgg 360
cacatgatga tgactgcatt gcgttacctt tgggtgcatgc aacacatgct tgaagcccag 420
agagcgacac acccatccaa acatctgctg cttggcaggg ctccagcagg gggggatcca 480
ctagttctag agcggccgca accggnggtg gagctcccat tcgcctataa gggngtcnnt 540

ttanccgcgc ttactgggcc cgtnngttta caaacgntcn cggactnggg aaaacccttg 600
 ggggttaccc aacttaattc ncctttgnaa gaanaatccc ctttttttgg caaggttngg 660
 ggngtnann 669

<210> 1109
 <211> 18
 <212> DNA
 <213> Oreochromis niloticus

<400> 1109
 acctgttctg tttccacc 18

<210> 1110
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1110
 aaatacctaa aagtcgctga t 21

<210> 1111
 <211> 225
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 8, 24, 29
 <223> n = A,T,C or G

<400> 1111
 tgacaaancc cttttttttc tttnttttnt tttttttgct taactctaag caactacagc 60
 agtaataaat aagattcttc acttataaat ctcacatatg tattatgtag cactgacatg 120
 tgcaaggatg tgtacacaca cacacacaca cacacacaca cacttttatg tgttgatgag 180
 ggtgacagta ttctaggtag tcatgcagta ggagaccctc tgttg 225

<210> 1112
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1112
 gcactgacat gtgcaaggat 20

<210> 1113
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1113
 caacagaggg tctcctactg c 21

<210> 1114
 <211> 687
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 428, 485, 499, 515, 519, 525, 526, 534, 540, 548, 566, 570,
 571, 575, 579, 584, 590, 593, 594, 597, 599, 600, 616, 622, 636, 637,
 655, 657, 660, 662, 663, 666, 667, 671, 685
 <223> n = A,T,C or G

<400> 1114
 tttgaaatcc ttggaccggc cccccctcg aggtcgacgg tatcgataag cttgatatcg 60
 aattcctgca gccacaacg ttggtgtaac tccaacacac actaaccttt gaaacaacac 120
 caaaccaatt agacttctcc actgtcttga acatgttacc tagcaacatt gtatccctgc 180
 agtgactttg tgcttatgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg ttgattttgt 240
 gctgcaagag gaatctccat ggaaacaaca acaggcagac acaacagcac agcttgactc 300
 acctgaaaaat catctgtcct acagataaaa cacaggcgaa cgaaccgagt ctttgtttgt 360
 ggctcgtagt gtctaaatag gacctttagc caataagatc cgagaaaaat ccaaagacgg 420
 attacatnct aaatgttaat cacaactcat gggatgtgtg tagacaactc taacacactt 480
 cctgncacac ctgttttant ggcaacttaa ttaanaatng gaagnnttgc attnaatatn 540
 ggaccatnat tttggggggg atcccncttn nttnttana agcngggccn gcnntcntnn 600
 gggggggggg cctccnaaat tnggcccttt tatagnngga attttcgcta ttttncngtn 660
 gnnganntta natggggctc ccttncc 687

<210> 1115
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1115
 acctagcaac attgtatccc t 21

<210> 1116
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1116
 tcgcctgtgt tttatctgta g 21

<210> 1117
 <211> 361
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 9, 15
 <223> n = A,T,C or G

<400> 1117
 gcaatcctnc tcggnacccc cttgtggttc ttacccgagt gactccctgc aggttcaggg 60
 agaagagggtg aggattcacg gcgatgaagt ctccgtagaa ctccctgcaga cacacacaca 120
 cacacacaca cacacacaca cacacacaca cacacacaca cacagacagt aagctatact 180
 tctgctatatt tggttttgat gatgtcactc aggtgtatga actgtgttca caccaaacat 240
 gaagcagagt gatggtgatg ctacgcagg gaggaggaca gctttccaag acatcctatg 300
 aattctcggc acagttttgt tctgtgtctg cattaaaatt aaatttgatc aaacagctcg 360
 g 361

<210> 1118

<211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1118
 gattcacggc gatgaagtct 20

<210> 1119
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1119
 cgtgagcatc accatcactc 20

<210> 1120
 <211> 631
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 1, 2, 3, 4, 6, 7, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20,
 23, 24, 28, 30, 34, 37, 44, 50, 53, 65, 72, 82, 87, 122, 125, 127, 149,
 153, 154, 441, 479, 502, 509, 531, 534, 544, 547, 567, 616, 626
 <223> n = A,T,C or G

<400> 1120
 nnnngnnngn nnnngnnnnn tanntttntn ttcnatngga acgnggatch aangggaaacg 60
 gtcnttcgt antggggaaa cntaccnata agcttgatat cgaattcctg cagcccaaatt 120
 tntgntntct gctgccttga ttgatgatng gcnnnggtttt ttcttgctca ctttctcttt 180
 actctatcca gattgtttct cgaccagcta agtctataat attgggaaaag atgtttttgat 240
 tgtaacaat ccaaacacac acataaacac acacacacac acacacacac acacacacac 300
 acacacacaa atgcaccccc aaactcatal gttcactactc aaacgcatal ttctatacct 360
 tgagcaaccc caccctgaag tggactccac tttatgaact gtttagagag aacttggtta 420
 gtggaatata aatatacatt nggggggatcc actagttcta gagcggccgc caccgcgng 480
 gagctccaat tcgccctata gngagtcgna ttacgcgcgc tcaactggccg ncgntttaca 540
 acgncgngac tgggaaaacc ctggcgntac ccaacttaat cgccttgacg cacatcccc 600
 tttcgccagc tggcgnaata gcgaanaggc c 631

<210> 1121
 <211> 19
 <212> DNA
 <213> Oreochromis niloticus

<400> 1121
 ttgggaaaga tggtttgat 19

<210> 1122
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1122
 gaaatatgcg tttgagtatg a 21

<210> 1123

<211> 610
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 3, 5, 9, 11, 14, 15, 20, 28, 39, 59, 62, 101, 102, 130
 <223> n = A,T,C or G

<400> 1123
 ttntntttnt ntcnngtagn ttctcacncc attggcccnt cctttttggg ttaaggtanc 60
 cnataagctt gatatacgaat tcctgcagcc caaatcttac nmtgagatca tcccataaaa 120
 aggctttctn tctctctctc tctctccctc tctctctgtc acacacacac acacacacac 180
 acacacacac acacacacac acacaagatc caatagtgtg gttgcagtca cgtggttctg 240
 atgacgtgag gaggcagcgc gattttttgag tggaggggcg aagtaaacaat ggaggacact 300
 gtggagagtc aggagagcag ctattgtgca acttttagacc ccgtttctcg ggagagatat 360
 aaacagatag ttaaaaaata tatcggacgt gatccgtatt ctttgaaaat gtccgaatac 420
 accacagcag taaaggattt gcctactatc gagggctgtg atgggggatc cactagttct 480
 agagcggcgc ccaccgcggt ggagctccaa ttcgccctat agtgagtcgt attacgcgcg 540
 ctactggtgc cgtcgtttta caacgtcgtg actgggaaaa ccctggcggt acccaactta 600
 atgcgcttgc 610

<210> 1124
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1124
 caatgagatc atcccataaa a 21

<210> 1125
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1125
 gtgactgcaa cccaactatt 20

<210> 1126
 <211> 537
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 3, 7, 17, 20, 21, 22, 23, 35, 40, 83, 86, 456, 463, 471,
 489, 510, 533
 <223> n = A,T,C or G

<400> 1126
 ttntatnttc atgtgantcn nnntctcccc cgcgntggcn gccgctctag aactagtggg 60
 tccccacca gcagaataag gtnggntcac catacagtct tagtgacagc tgagtattga 120
 aaaggctgct tgcagaagag aggtgcctct gtttgtgtgt gtgtgtgtgt gtgtgtgtgt 180
 gtttgtgttt gtgtgcctat gagaagaaga gagagacaag acacaacaaa aaagaatagg 240
 agatagtctg ttgccctcag acacatcttt gcaactcaag gcatcacact ggggtgtgtg 300
 gtttgtgagg ttctgcatat tttgagcact ttttgagcaa gatttaatta aattaaatta 360
 aatttaattc aattttatatt atatagcgcc aaatcccaac aacagtcact tcaaggcgcg 420

ttatatattgta aggtagaccc tacagtaata catacnaaga aanacccaac natcatatga 480
ccctgagcng gcacttttggg tgacagtggg aaggaaaaac tctccttcaa cangaaa 537

<210> 1127
<211> 18
<212> DNA
<213> Oreochromis niloticus

<400> 1127
ataaggtcgg gtcacccat 18

<210> 1128
<211> 19
<212> DNA
<213> Oreochromis niloticus

<400> 1128
agggcaacag actatctct 19

<210> 1129
<211> 836
<212> DNA
<213> Oreochromis niloticus

<220>
<221> misc_feature
<222> 5, 6, 7, 8, 15, 21, 30, 37, 44, 46, 513, 580, 645, 659,
660, 665, 666, 668, 670, 677, 696, 705, 768, 769, 774, 787, 789, 795,
803, 806, 809, 815, 827, 833
<223> n = A,T,C or G

<400> 1129
ttgtnnnncc tcgtnaatgc ncttttgaan gcggccncgg ccgntntaga actagtggat 60
ccccccaat tgatgaagag gtaacaccag agtagaggct attacagaag tcgaggcgag 120
atgagatgaa gccatgggtc gctgtgatat atgccacaca cacacacaca caaacacaca 180
cacacacaca cacacacaca cacacacaca cacacacacc gttattgctc acgatcacgt 240
tttttattta taataacaat gcaccgtgac agctcgtccc ggtccagcca gcctccact 300
cgactctgcc gtcactatat agacacacag aaggaagaca ctcatgacac aatcgccacc 360
acctgtggct cacctgcctc ccggtgggct gcaggaattc gatatcaagc ttatcgatac 420
cgtcgacctc gagggggggc ccggtaccca gcttttggtc cctttagtga gggttaattg 480
cgcgcttggc gtaatcatgg tcatagctgg ttntctgtgtg aaattgttat ccgctcacaa 540
tttcacacaa catacgagcc ggaagcataa agtgtaaagn ctgggggtggc ctaatgagtg 600
agcttactac attaattggc gttgcgctca ctggccgctt ttcangtcgg ggaaacttnn 660
tcgtnnnann gttgcantta ttgaattcgg ccaacncccc ggganaggcc gggttccggt 720
ttgggcgctt tttccgcttc ttggttaatt gacttgcttg cgcttggnnc cttncggttg 780
gggcgancng gtatnaagct tanttnaang gcggnataac cgggttntca canaat 836

<210> 1130
<211> 21
<212> DNA
<213> Oreochromis niloticus

<400> 1130
tacagaagtc gaggcgagat g 21

<210> 1131
<211> 19

<212> DNA
 <213> *Oreochromis niloticus*

<400> 1131
 gtggtggcga ttgtgtcat 19

<210> 1132
 <211> 693
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 5, 8, 49, 55, 486, 523, 542, 557, 572, 593, 599, 602, 606,
 610, 613, 614, 617, 623, 629, 634, 637, 638, 643, 644, 646, 651, 654,
 662, 666, 671, 672
 <223> n = A,T,C or G

<400> 1132
 gggtngantc tctttgacat aagactcttg gaaagcccc gctttggcng ccgcncctaga 60
 actagtggat cccccctgc attttgtctg cctcagtctc ctgggggcag ttattgcagc 120
 ttcctgtgct cattatcatt atctatcaca cacacacaca cacacacaca cacacacaca 180
 cacacacaca cacacacacc acaagaaaat tgctgattta tgtgtcatgg catgtttttt 240
 tccctttggg tttccttaca gatacagttt gtgatacatc atgcttttct atttgtgttc 300
 aatcctttta ttatatatttc ttctattttc tcccccatgt tttgtttttt ctgccggtca 360
 gcttagacat caggcagcag tgggtgggacg ccatcacatg tagacaaact ggaatctaac 420
 cattgtgtga aagaatgtag ggggacagac gtttcaaaca cagcaagtgt gggctgcagg 480
 aattcnatat caagcttatc gataccgtcg accttcaggg ggngggcccg gtacccccag 540
 cnttttggtc ccctttnaag tggatgggtt tnaattgccc ccccttttgc cgntaaatnc 600
 gngggncan aannttngtt ttncctggng gtgnaanncc ggnncccc ntnaaaaat 660
 tnccncaaaa nnatttatcc ttccccccc cct 693

<210> 1133
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1133
 agttattgcg gcttcctgtg 20

<210> 1134
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1134
 aaacaaaaca tgggggagaa a 21

<210> 1135
 <211> 547
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 2, 7, 15, 103, 119, 283, 468, 525
 <223> n = A,T,C or G

<400> 1135
 tncgttnccc gcggnngcg cgcgtctaga actagtggat ccccccacgat gaccttaagc 60
 agagctagat aaaaatgaaa cccatcgtgt ctccgtttat ggnttaccaa atgaagaang 120
 agtgccccgc caaagtaaaa caacacagtc caagttccag atctgctcac agcatttgct 180
 gctggcggca tatttttttt ggctattaca cgagtttttag tcttttagtg acatgatgag 240
 gatgtcaggg ggtcagaggt cacagagaga tggatgaacc ctnatttgct tcagacttaa 300
 agtgacctgt gtgggctatt atgaaacaac tgcacttgta gaatcatgat caaggagata 360
 agatgagagg agcgggactg ttgctcacag aagggttatt agaaaatgct gtgtgtgctg 420
 gcgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgcaattcc agcgccctnat tattgctcag 480
 ttgcttggag actgccacag ggcagcgctc acacgggggc tgcangaatt cgatatcaag 540
 cttatcc 547

<210> 1136
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1136
 ctgtgtgggc tattatgaaa c 21

<210> 1137
 <211> 16
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1137
 ggcagtctcc aagcaa 16

<210> 1138
 <211> 381
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1138
 gcagcacact gttcaaatgt aaaatgcttc cacgcacctt tggtgaaacg tacagcgctg 60
 tgatctccaa acacatcgtc tgtatccttg aagcctgcag atatgctgaa tgcacccct 120
 cttgggtggct cagggctctt tttctcctgc ctttgtggca cactttgtgt ttctgtgcac 180
 tctgctgctc ccagctgtca atgaatgggt ttcaaggaaa ccacagagag cagcgagtgt 240
 gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtcacattac 300
 aggcaaaaac acccatcagc tctgcacggg tggttctgtg atgtcagtgt tttctacata 360
 caggctttac ctcagcgggc t 381

<210> 1139
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1139
 tttttctcct gcctttgtgg 20

<210> 1140
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1140

cgctgaggta aagcctgtat g 21

<210> 1141

<211> 221

<212> DNA

<213> *Oreochromis niloticus*

<400> 1141

aaccaccct agtttaaata ctcagacaca cacactcaca cgtcacctca atccttccca 60
gagtgccttt gttctgtcga ttgttctgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg 120
tgtgtgtgtg ttataaggag agagaatcat gccatacgaa aaatgacaac cagtaaggac 180
cgtgcctgcc aaaaacctaa gacatacaaa gcatgagggtg t 221

<210> 1142

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1142

tcccagagtg cctttgttct 20

<210> 1143

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1143

gcacggtcct tactggttgt 20

<210> 1144

<211> 597

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 2, 3, 7, 8, 13, 112, 539, 572, 578, 591

<223> n = A,T,C or G

<400> 1144

anntccnaa gcncctttgga ataccccggc cctttctgga ggctcgacggt atcgataagc 60
ttgatatcga attcctgcag cccttaaaaa acaaaacaaa aacaaaagca gntctcttgg 120
caatttgctt aggtggcggg ctggtgcctg catggtgcct ttcgtgactg ttattcccac 180
aggaagtga ggttgtggaa tgcccctgca gtctctctcc atatgcccag aaaaaggaac 240
acacacacac acacacacac gcacacacac acacacacac acacacacac acacaagcaa 300
ggacaggaga ggctttgctt tattgtgtgg aacactatat ttatggataa tgtttgattc 360
ttgggggggg atccactagt tctagagcgg ccgccaccgc ggtggagctc caattcgccc 420
tatagtgagt cgtattacgc gcgctcactg gcccgctcgt ttacaacggt cgtgactggg 480
aaaacccttg gcgttaccca acttaatcgc cttgcagcac atcccccttt cgccagctng 540
gcgtaatagc gaagaggccc gcaccgatcg cncttccnaa cagttgcgca nctgaat 597

<210> 1145

<211> 17

<212> DNA

<213> *Oreochromis niloticus*

<400> 1145

atgcccctgc agtctct 17

<210> 1146

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 1146

ataaaagcaaa gcctctcctg t 21

<210> 1147

<211> 369

<212> DNA

<213> Oreochromis niloticus

<400> 1147

tgcagggtg gaggtagcag gagtccactg ttactgcaca acgctcgcgc acagacacat 60
gcacacacaa aacctctcat ccctctggag aaaatgaatt ctctttctct ttttctctct 120
ttccccccct ttaccttttt gcctctgtca gcgcaactac cataacttca acctgaacac 180
aaatcccata tctcacacac aaacatgcac acacacatat atgcacacac acacacacac 240
acacacacac acacacacac acacacacac acacacacac acacacaaag agtcactcac 300
ctggtcacct gcccgagggg ttgtgatgct gtttcactct ttgcaggggt ctctgtttctg 360
tgtccgcct 369

<210> 1148

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 1148

agcgcaacta ccataacttc a 21

<210> 1149

<211> 18

<212> DNA

<213> Oreochromis niloticus

<400> 1149

gcaggtgacc aggtgagt 18

<210> 1150

<211> 562

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 405, 435, 465, 485, 503, 532

<223> n = A,T,C or G

<400> 1150

atattgtgtg aggggggtgc ttctgtgtgt catgctgtgc tggcaatatt gcaaaagaca 60
tgctcagggtg tgcgttcaag tgtgtgtgtg tgtgtgtgtg cgtgtgtgtg tgtaagacag 120
agagagataa ggatctttgt ctatttccgc acctgcttaa agagttgtgg gaccgtgatc 180
tgattggcgt ctctgaaca gggacttctg gtatggacgg aggctcagt accggcgtct 240
gttctgtga taacagggga ggggaaatgt gaaacaccag catactgaat gacaagagag 300
tgggggatcc actagttcta gagcggccgc caccgcggtg gagtccaat tcgccctata 360

```

gtgagtcgta ttacgcgcgc tcaactggccg tcgtttttaca acgtncgtga ctgggaaaac 420
cctggcggtta cccancttaa tcgccttgca gcacattccc ctttngccag ctggcggttaa 480
tagcnaaaaaa gccccgcacc ggntcgccct ttccaacagt ttctccatcc tnaaatggcc 540
gaatggaaat ttgtaagccg tt 562

```

```

<210> 1151
<211> 19
<212> DNA
<213> Oreochromis niloticus

```

```

<400> 1151
gggtgtcttc ctggtgtca 19

```

```

<210> 1152
<211> 21
<212> DNA
<213> Oreochromis niloticus

```

```

<400> 1152
atcccccaact ctcttgtcat t 21

```

```

<210> 1153
<211> 562
<212> DNA
<213> Oreochromis niloticus

```

```

<220>
<221> misc_feature
<222> 405, 435, 465, 485, 503, 532
<223> n = A,T,C or G

```

```

<400> 1153
atattgtgtg aggggggtgtc ttcttggtgt catgctgtgc tggcaatatt gcaaaagaca 60
tgctcagggtg tgcgttcaag tgtgtgtgtg tgtgtgtgtg cgtgtgtgtg tgtaagacag 120
agagagataa ggatctttgt ctatttccgc acctgcttaa agagttgtgg gaccgtgatc 180
tgattggcgt ctcctgaaca gggacttctg gtatggacgg aggctcagt accggcgtct 240
gttcctgtga taacagggga ggggaaatgt gaaacaccag catactgaat gacaagagag 300
tgggggatcc actagttcta gagcggccgc caccgcggtg gagctccaat tcgccctata 360
gtgagtcgta ttacgcgcgc tcaactggccg tcgtttttaca acgtncgtga ctgggaaaac 420
cctggcggtta cccancttaa tcgccttgca gcacattccc ctttngccag ctggcggttaa 480
tagcnaaaaaa gccccgcacc ggntcgccct ttccaacagt ttctccatcc tnaaatggcc 540
gaatggaaat ttgtaagccg tt 562

```

```

<210> 1154
<211> 19
<212> DNA
<213> Oreochromis niloticus

```

```

<400> 1154
gggtgtcttc ctggtgtca 19

```

```

<210> 1155
<211> 21
<212> DNA
<213> Oreochromis niloticus

```

```

<400> 1155

```

atccccccact ctcttgtcat t

21

<210> 1156

<211> 615

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 314, 321, 456, 507, 586, 603

<223> n = A,T,C or G

<400> 1156

```

ttgaagaccg tagctccacc gcggtggcgg ccgctctaga actagtggat cccccacagt 60
gagatcaaga cctggaaaca ttttggggta tgtaggaatt ttgaagtgtg tgtgtgtgtg 120
tgtgtgggtgt ttttcaccac aatatgccaa ctaattgaaa atgttttagac agatcctaac 180
atcactacta aaaaaaacctg tgatggtaat gtagtctttc ttctaggggt tctaaggggt 240
tgttgcacat ttatcagcta atgagaagtg ttatcagaca ttagatgggt tgctatgcag 300
cttgtttatc tcantgattg nccacagata atgccttagt aagcattcag tgcattatca 360
gttaaattgc ctatttcccc tcatgtatat taaactactc ctgatgtggg gggctgcagg 420
aattcgatat caagcttatc gataccgtcg acctcnaggg ggggcccggt acccagcttt 480
tgttcccttt agtgagggtt aattgcncgc ttggccgtaa tcatgggcat agctgtttcc 540
tgtgtgaaaa ttgttatccc gtcaccaat ttccaccacc aacatncgag cccggaagca 600
tanaagtggt taaac 615

```

<210> 1157

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1157

caagacctgg aaacattttg g

21

<210> 1158

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1158

caacaacccc ttagaaaccc t

21

<210> 1159

<211> 610

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 3, 4, 17, 19, 23, 36, 459, 468, 561, 571, 575, 587, 588,
591, 603, 604, 605, 606, 607, 610

<223> n = A,T,C or G

<400> 1159

```

ttnnatccct ttggaananc cncctcttt tggagntcga cccgtatcga taagcttgat 60
atcgaattcc tgcagcccc tcatatctgg ggcagactgt gctttcaatt caatgccagc 120
atgagctgtg caactacata tagctgcaga cgagcatgcc aaaacataca tcaatggatc 180
ctctgatgta gtgcccttct gcatatctga ctgtcaggta ttttatgtta ctgacttata 240

```

```

gtattttcata aagacgtgct tgaacttata tatacacaca cacacacaga cgcgcacaca 300
cacacacaca cacacacaca cacgcacaca caagctgttc aggctgggtg gtaagcaccg 360
ggcgaactgc cagtaaaggc tagatgggag agctgtagaa agatggaaga agttaagcag 420
gagaggagcg gtgacggcat gggggggatc cactagtntt agagcggncg ccaccgcggt 480
gggagctcca attcgcccta taggtgagtc ctattacgcg cggctcactg gccgtcgttt 540
tacaaccgtc ctgaactggg naaaaccctg ngcgnttccc aaccttnnat ngggcttgga 600
ggnnnnngcn 610

```

<210> 1160

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1160

ctctgatgta gtgcccttct g 21

<210> 1161

<211> 17

<212> DNA

<213> *Oreochromis niloticus*

<400> 1161

gtcaccgctc ctctcct 17

<210> 1162

<211> 334

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 2, 4, 21, 25, 36, 38, 47, 78, 98, 280, 281

<223> n = A,T,C or G

<400> 1162

```

tnanccttta agccttgaag nccncgagt tagcgntngc ccagctnggc ggcacggagc 60
agcttcccct gctggctnat ttggtgcttt attactgngg acatgcagac cagcctgttc 120
tggtgcagct ctaccagggt gaggtcagag cagattcatg tgcacacaca cacacacaca 180
cacacacaga cacacacaca gacatgcaca ggacacaata accatgaata cttccttcct 240
ctgcacagct caccctgggt ggaggagagc ggagaagagn ngtgtttatt cagtctctgg 300
agctcggaca cagggtgga actagagctg tgaa 334

```

<210> 1163

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1163

cctgttctgg tgcagctcta 20

<210> 1164

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1164

agctgtgcag aggaaggaag 20

<210> 1165
 <211> 578
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 451, 457, 458, 468, 477, 478, 484, 487, 510, 513, 515, 519,
 523, 530, 531, 533, 546, 550, 561, 562, 563, 568, 571, 574
 <223> n = A,T,C or G

<400> 1165
 attccccgtag ctccccgcgg tggcggccgc tctagaacta gtggatcccc ccctggcatc 60
 agcatccaag ctagcaaaac tgaaaagtgtg cagagcttga ggttgcaagt tgaagcaatg 120
 gtttttctaga gtgggtgggg tagggtgtgt gtgtgtgtgt gtgtgtgtgt cggtaggagg 180
 gatattgagcg aggaaaggta aatcatgaag ccgaggttct cagggacaga ttgagatcat 240
 aattcaaatc agccatatta cagattgtga agtggaggag agtgattgcc tcaattaagc 300
 cagtttgtct tgagggtcct ctttgcttag tctgcacagc tcacagtccc tcctctttca 360
 gcatctctc ccgactctc ttcttctact ctcacccacc ttctcccgtg gccattataa 420
 tttgatggtg ccatcatcat ctgtgttctg nccttgnnaa gtcccggngg ctgcaannaa 480
 ttcnatntca agccttatcc atcccgtcan ccntnaagng ggnggccccn ntncccaat 540
 tttttngttn cccttttaac nnnagggnnt naantccg 578

<210> 1166
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1166
 aatgggttttc tagagtgggt g 21

<210> 1167
 <211> 19
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1167
 cctcggcttc atgatttac 19

<210> 1168
 <211> 404
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 43
 <223> n = A,T,C or G

<400> 1168
 ccctcactca gacacacaca gatgcatagt cctcacgcac gcncgcacac acacacacac 60
 acacacacac acacacacac acacacacac acacacacac acacgcgcgc gcgcacaggt 120
 aaccctttaa tcacctgtac tgtacgtcaa cttttaagat tttaatgcac acacacctca 180
 aattttctgcc gtagctcctc gttgccctcc tccccctccg gagggacagg tacattgaag 240
 tactcgctt cttcttggga gagcagctta aacctaaagt gagagaatat ttccagtcaa 300
 atcaattccc aattagttaa tacaattggg gtgtttaact gctgccatta gctgaagctg 360

ctgacagtta ctgcaccaat ttaagggctct aaagaataat cagg 404

<210> 1169
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1169
 cacagatgca tagtcctcac g 21

<210> 1170
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1170
 tcccaagaag aaggcgagta 20

<210> 1171
 <211> 611
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 3, 4, 5, 6, 8, 9, 10, 11, 12, 15, 16, 20, 22, 29, 31, 33,
 40, 43, 49, 63, 67, 71, 91, 108, 109, 135, 347, 534, 546, 554, 578, 582,
 595, 608, 611
 <223> n = A,T,C or G

<400> 1171
 ggnnnnngnnn nntanmtttn tnttcctant ntngaagatn tanaggganc cctcgtttct 60
 ttngggnaac naccctatcg ataagctgga ngtcgaattc ctgcagcnnc tttgtgtgtg 120
 gtctgagtgg ttccngggggg ggaggagtga accagtctca gacacttcag actgcagtct 180
 ctctctctct ctcacacaca cacacacaca cacacacaca cacacacaca cacacacaca 240
 cacacacaca caagcagggg tggacgcacg cacacacatg cacacacacg cacacacaca 300
 cacacacaca cacatgcaca cagtgatgag tgcaaagagg gagaggncca ataaacaagg 360
 gggggatcca ctagttctag agcggccgcc accgcggtgg agctccaatt cgccctatag 420
 tgagtcgtat tacgcgcgct cactggccgt cgttttaciaa cgtcgtgact gggaaaaccc 480
 tggcgttacc caacttaatc gccttgcagc acatccccct ttcgccagct ggcngtaata 540
 gcgaanaggc ccgnaccgat cggcctttcc aaacaagntg cncaacctga atggncaatg 600
 gaaaatgnaa n 611

<210> 1172
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1172
 ggagtgaacc agtctcagac a 21

<210> 1173
 <211> 19
 <212> DNA
 <213> Oreochromis niloticus

<400> 1173

tccctcttttg cactcatca 19

<210> 1174
 <211> 304
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 304
 <223> n = A,T,C or G

<400> 1174
 tggatgtact gtcctatgtc agtgaaggac tctggcaacc cactaatgca gctggatttg 60
 cattgagtga aatgaagcga aagtttttaa tggcatcagt cttgctatta aagcaaagca 120
 aaacatcaga caaacagggg ggagcagctc tctcctctat ccgtgtgtgt gtgtgtgtgt 180
 gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtatgtgt gtgtagtaac tgggggagtg 240
 ctgtcccttg cctctgtcga gtgtgtgcag cagctgcagc tttcagcctc ggtctatact 300
 gtan 304

<210> 1175
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1175
 gctggatttg cattgagtga 20

<210> 1176
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1176
 tagaccgagg ctgaaagctg 20

<210> 1177
 <211> 405
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 15
 <223> n = A,T,C or G

<400> 1177
 tgaattatta aaagngttgt tttcccttat tgcattgcag caatgtgcct ctttgctaga 60
 aatgagctgc acattgtgga gtttgaatgc tttaaagcgac ccacctcaa cagcaaagcc 120
 aggagaggag cgccccccac ccccgacaca cacacacaca cacacacaca cacacacaca 180
 cacacacaca catctgaata tctgaatgac cacaacgtta tgctcagatg gctctcttac 240
 gtttctctta tataatgcac gttgtgaact aactagtttg ttttgctaaa ctgtgcaggg 300
 ctgcaactaa tgattatctc cattattgcc taatggacat tacactataa agtggtggag 360
 aatggtgaaa atgcccata caattttcta aagcccaagg tgatt 405

<210> 1178
 <211> 20

<212> DNA
 <213> Oreochromis niloticus

<400> 1178
 caacagcaaa gccaggagag 20

<210> 1179
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1179
 agccctgcac agttagcaa 20

<210> 1180
 <211> 484
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 419
 <223> n = A,T,C or G

<400> 1180
 agaactagtg gatccccccc acacagggtg agtctggcag ctgtgtgaag gtcagctgat 60
 gctggactgc tgagaggaaa gtagctgcac gcgccctctg cagtctgtgt gtgtgtttat 120
 ctgtctgcat cagtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgctgct gtctgtgtgt 180
 gtgtccctgt gtttgtgtgt gtgtgtgtgt tgcctgtga tgtttatcta cacactgtgt 240
 tgacctcatt tattatttac agccacaaa ctgaagactg aaacaccaac agctgcagtt 300
 cctgagacgt ccagcagagg cagcagttag ccagccccac acagacagat gtgggttcaa 360
 acagcagcag ctgcagctct gatgtttaga ctgtcattat cttccatcca cagggttgng 420
 ctgcatttgc ctttctagtc tcaactgacca ctcaaagctt tatcacacct acagccagtt 480
 gaat 484

<210> 1181
 <211> 19
 <212> DNA
 <213> Oreochromis niloticus

<400> 1181
 gctggactgc tgagaggaa 19

<210> 1182
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1182
 ctgctgtttg aacccacatc t 21

<210> 1183
 <211> 180
 <212> DNA
 <213> Oreochromis niloticus

<400> 1183

aggcttgaat gatggcttta aagggggcag tatataacct gtgtgtcttt atcattatat 60
 gtgtgtgtgt gtgtgtgtgt gtgtgtttcc tggagagcaa aggctgtgaa tgaactccta 120
 aatcacacta ttgatcagcc cttcctccca gacacacgct gggatcgagg gcagttaa 180

<210> 1184
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1184
 atggctcttaa agggggcagt 20

<210> 1185
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1185
 ggaggaaggg ctgatcaata 20

<210> 1186
 <211> 309
 <212> DNA
 <213> Oreochromis niloticus

<400> 1186
 aggtcttggt tttttttggt ttttggtttt ttttaatat gctctcacag ccaacccagc 60
 agatgcagag agaggggaagt gggtagagg tgaggggaac accttcccca tcaaagatcc 120
 ccgttctcct ctccaacgct gagacagcaa taaccaaggc agcttttgaa tgttccagca 180
 tcaactctccc aacacacaca cacacacaca cacacacaca cacacacaca 240
 ctataaataa ccacaagtgt cgtaagaata gaaaaacaaa actaaaactg taaatgatga 300
 caaataagt 309

<210> 1187
 <211> 16
 <212> DNA
 <213> Oreochromis niloticus

<400> 1187
 acaccttccc catcaa 16

<210> 1188
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1188
 tgagatcatc ccataaaaag g 21

<210> 1189
 <211> 645
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature

<222> 2, 3, 4, 10, 11, 15, 16, 27, 33, 35, 36, 38, 48, 58, 67,
68, 88, 91, 111, 112, 114, 139, 141, 142, 398, 578, 591, 603, 622, 629,
641, 645

<223> n = A,T,C or G

<400> 1189

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gmnaggtgn ngtnnactt tatctntaa cangnnncnc caacgtgncc tctcatcnct 60
tttgganntc gaccgtatcg ataagctnga nategaattc ctgcagccca nntncacccat 120
ctcctcttca gccacgagng nnttccagtg tagtggacca agctctcacc aaagcaaagg 180
cttagaaaaga acacacacac acacacacac acacacacac acacacacac tgataaaaaga 240
ggggtagtga taatggtgga ggcttaagag cttcaaattg cccaaaatgg aaagtgtgct 300
ctctgcagga gattgagaga tagagaggga accatgggtc tgctattttt ggtctactag 360
ggggatctaa atctgtggct ggatggaaga aaagcctnct gggtaatgac cctaaaagcc 420
cacatcaaaa agagacaccc acagtttttt tctgatattc atggtggtga ctggaaccag 480
gtgtgataaa atagctgaaa gctgaaaaca aaaagcaacg aatgacagag ttcttatttt 540
tatcacagtt tttaagccaa aaactgcaaa atcataangg gtcaagttaa ntaccagata 600
aanggccttt aattcataaa tntggcaana ataacaaaaa ngan 645

```

<210> 1190

<211> 18

<212> DNA

<213> *Oreochromis niloticus*

<400> 1190

```

ccacaacacc atctcctc 18

```

<210> 1191

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1191

```

ccattatcac taccctctt t 21

```

<210> 1192

<211> 559

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 2, 3

<223> n = A,T,C or G *

<400> 1192

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anncctttgc tccccgcggt ggcgccgct ctagaactag tggatcccc actcctctca 60
ttaacctctg gtatttcaga ccagtttcca tttatattta atgagagtct ctgcacaagc 120
gattttagt ggtgagcagc accatcaca attctctttg actgtacggc acactccctc 180
catgggtctt tacaagatcc cgctaaagga gcaaatggga tccccactat ctgaactatg 240
tgctatatat atatatgtgt gtgtgtgtgt gtgtgtgtgt gtgtagtagc aaagactgag 300
caagagagag gtaataggag aaagataaga gatgcagaga gaatgagaaa aagcaaagca 360
gaaatagaac catgtcttga ggttgtttgc ttggaaaact tagcaatctg ctgcttgagt 420
gcccttctct ttgtcacatc cacctctgtg gggggctgca ggaattcgat atcaagctta 480
tcgataccgt cgacctcgag ggggggcccgt gtcccagctt ttggtccctt tagtgagggt 540
taattgcgcg cttggcgta 559

```

<210> 1193

<211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1193
 tacaagatcc cgctaaagga g 21

<210> 1194
 <211> 19
 <212> DNA
 <213> Oreochromis niloticus

<400> 1194
 ggcaactcaag cagcagatt 19

<210> 1195
 <211> 421
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 413
 <223> n = A,T,C or G

<400> 1195
 atatgttctg gacactcagg tgaagagagg tgctgagctg tcaactgatt accaggtggt 60
 ggtgagatgg atcagctggt ggagaagaat gctggacaga cagacctgat agtaatggtg 120
 cgctaggaat agcaatagta tgctgctttt aattagaaat caatatcaca tgccccccag 180
 aaaaggaaac aataattttt ttccacatct taaaggcagg aataaattac cctcaaaaaga 240
 attacactca gtgaaaatgt tgccttgctg gccaatgct cttctttctt tttctttacat 300
 tctttacatgc atgaattctc tctctctctc tctcacacac acacacacac acacacacaa 360
 gctggagatg aaagcctcat tcaagggtgta actgtgttat aaaaagaaat tanttggaga 420
 t 421

<210> 1196
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1196
 atggtgctgct aggaatagca 20

<210> 1197
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1197
 tgaatgaggc tttcatctcc a 21

<210> 1198
 <211> 660
 <212> DNA
 <213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 2, 3, 4, 5, 7, 8, 10, 11, 12, 15, 16, 20, 21, 22, 23, 24,
25, 38, 652, 658

<223> n = A,T,C or G

<400> 1198

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gnnnnntnnn nnttnnttgn nnnnttccgt tgggagcncc ccgcggtggc ggccgctcta 60
gaactagtgg atcccccaaca atgatagcag tgggaattatc taacacacag atacacacgt 120
aacagccaca gaccctaacc atgcttatct aagtggcgat attacagtaa tacattataa 180
tcacactctt tgatcactct atctgggaca cctgctgcac tttgggggat gcagaactgc 240
tttgtctgca gatatataca cataacacac acacacacac acacacacac acacacacac 300
acacacacac acacacacac acacactcta tatgacaacc aaattttccc ctcacaaccg 360
taatggaaca aacggcagag ctattagatt agcaggacat gtaacaacac aataaaactgg 420
gagcacacct gaggctggat gcagtgtgaa tgggctgcag gaattcgata tcaagcttat 480
cgataccgtc gacctcgagg gggggcccgg taccagctt ttgttccctt tagtgagggg 540
ttaattgcgc cctttgggag taatcatggc atagctgttt cctgtgtgaa aattgttatc 600
cgctcacaat ttcacacaac atacgagccg gaagcttaaa gtgtaaagcc tnggggtgnt 660

```

<210> 1199

<211> 16

<212> DNA

<213> *Oreochromis niloticus*

<400> 1199

tgcaactttgg gggatg 16

<210> 1200

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1200

taatagctct gccgtttgtt c 21

<210> 1201

<211> 326

<212> DNA

<213> *Oreochromis niloticus*

<400> 1201

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tttttaatac aacactgaca caaagttaca tctctgactc gtgtgtgtgt gtgtgtgtgt 60
gtgtgtgtgt gtgtgtgtgt ttcgcatttt gctaactttg tgagaacatg tttcagagtg 120
aggtcagttt aatcttcaga cctcagcctc agaaacccac ggtctgcatg aatactgctt 180
tttttcttag cacttggaag taactaagta catttactta agtacctatc agtttttagta 240
gaataattct cctccacagt tcaggtgtaa actacgtctt ttactccaat tcatttgaca 300
tctatatoga catacttcag gtatca 326

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<210> 1202

<211> 25

<212> DNA

<213> *Oreochromis niloticus*

<400> 1202

cactgacaca aagttacatc tctga 25

<210> 1203

<211> 19
 <212> DNA
 <213> Oreochromis niloticus

<400> 1203
 agaccgtggg tttctgagg 19

<210> 1204
 <211> 304
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 4, 5
 <223> n = A,T,C or G

<400> 1204
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 gaaacaggaa gcaggaagtg atacctgttg gagcaccttt gattggttag catttttgaa 120
 tgagcctgct ttcaaaataa agagcgggtga gacgtgtggg cggagcagac tgcccaaac 180
 tcaagatgag atgtcgtgtg ggtggagcct gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt 240
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 tggg 304

<210> 1205
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1205
 cctgttgagg cacctttgat 20

<210> 1206
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1206
 taggaacacc tgagccctgt 20

<210> 1207
 <211> 452
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 93
 <223> n = A,T,C or G

<400> 1207
 tcgggaagga caagctgcta gactggctct gggatgatggg ggggagtgat ggtgggggtga 60
 tgggtgtttgg cttgtcaggg ctcaaccac atncaaggaa cagtctccac acacacacac 120
 acacacacac acacacacac acacacacac acacacacac acacacacac agatgctgtc 180
 tcacacacac ctaacagaat gtgacagggtc tgcctctgaa cagtgtccct gccacaaaac 240
 agaatttttc agtatttgtc ttttagccac gctagcagca tgactccagg aatagcaata 300

gagagctgaa tcgctacact ataccagctg atttctgttt tttaagtctc aatcacgccg 360
 taaaaggcta aaaccagagt ctgaatgtaa aagatggctg tggcaaccat aacatcactc 420
 acaggtttga gggcttttta aagccttcat gt 452

<210> 1208
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1208
 gatggtgttt ggcttgtcag 20

<210> 1209
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1209
 attcctggag tcatgctgct 20

<210> 1210
 <211> 545
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 2
 <223> n = A,T,C or G

<400> 1210
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 ttgagtcaat tccctgtgaa ttaacataaa tgtgggtgatt cgccaacata agcagctgtg 120
 ttatgactga tgtgaataca gtggaagggt ctggaaaagc agatgcacag ctatgagctg 180
 ctgcattgct gctagtcagg agctgtcagg aaaagactag aagcagggtcc cagatgggaa 240
 cgcatgtgaa cacaaagtag agctttgcat gctcagcaaa ctttcttaag ataaatacaa 300
 ttgtgtgtgt gtgtgtgtgt gtgtgtttga gtgctggagg ggtctttcac agttccttgg 360
 aataagcctg ttcttgctgt gtgagggtgc agctaaacat aaatcatgca ttaggctttc 420
 ttagaggaga acttggtttc gaacatatca gcttgaattt cggacccgcg tgggctgcag 480
 ggaattcgat atcaagctta tcgatacccg tcgacctcga gggggggccc cgggtcccag 540
 ctttt 545

<210> 1211
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1211
 ggtgattcgc caacataagc 20

<210> 1212
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1212
 aactgtgaaa gacccctcca g 21

<210> 1213
 <211> 474
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 412, 443
 <223> n = A,T,C or G

<400> 1213
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 gtctgatgtt cattttttaa tgaaagaaga tgatggacaa caggtatgac agcagtaatg 120
 gcagtgtgtg tgtgtgtgtg tgtgtgtgtg tgagcggagt gtattattga caaaacacaa 180
 atgtcttcat cacgtggact ccaacatcag cgcacagagt cagacgctgt cagcacgtct 240
 gtcacaggt gtgttgctgc agtgtgtgtt acacagcaga cgagaaaatg ttacctcctg 300
 cttttcttaa aaaagagctt ttgaagcgat gcgtctcaca ggaccaatca cctcagagcg 360
 gtcaaaccca ccttgggtcg ggctgaaagg actcttgcct tccataaact tncatgttga 420
 agcttattgg ttacattttt ggnaccgtca cacaactaaa cacaagatgg gggg 474

<210> 1214
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1214
 ttaaccgctg agctgtgtgt 20

<210> 1215
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1215
 gacgcaacac acctgatgac 20

<210> 1216
 <211> 322
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1216
 ccgtgacctt tgtgggctga atgctaacgg gggctaagga atgcagccgc tggggtaaaa 60
 cgccacacac acacacacac acacacacac acacacacac acacacacac acacacacac 120
 acacacacac acccttctct ttttggagga gcactttaaa acgcagtcag agctgttgac 180
 ttgtggctgc ttttgggata agagacagag gtggagagat ggggggtggat gtgtagcact 240
 ctgccgccga ccggcaggat caatgaaggg cacttatgaa gagaaagctc actgcttgga 300
 agatttaciaa tgaatggctc gg 322

<210> 1217
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1217
 acctatgtgg gctgaatgct 20

<210> 1218
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1218
 caaaagcagc cacaagtcaa 20

<210> 1219
 <211> 605
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 2, 3, 10, 34, 36, 38, 43, 48, 507, 515, 520, 528, 536, 541,
 545, 597
 <223> n = A,T,C or G

<400> 1219
 tnnttgatcgn gatcttttttg aaaacccccgc tccntntnga ggncgacngt atcgataagc 60
 ttgatatcga attcctgcag cccccctcc ctcacagcaa aggtttgttt gattgggtcc 120
 tgcggcaagg tcacacacac acacacacac acacacacac acacacacac acacacacac 180
 acacacacag ggggaacaat caataacgga tggctggatt aagggtgtcag gacatctatg 240
 tgtccagcca gcatacggct gaataactct tgaacacaca cacacacaca cacacacaca 300
 cacacacaca cacacacaca cctccatata cagctttcct attgtccgct gtccatcacc 360
 acgggggggga tccactagtt ctagagcggc cgccaccgcg gtggagctcc aattcgccct 420
 atagtgagtc gtattacgcy cgctcactgg ccgtcgtttt acaacgtcgt gactgggaaa 480
 accctggcgg ttacccaact taatcgncct ggagnacatn cccctttngc aggctngcgt 540
 natancgaaa gagggccgca ccgatcgct tccaacagtt gcgcaacctg aatggcnaat 600
 ggaat 605

<210> 1220
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1220
 acagggggaa caatcaataa c 21

<210> 1221
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1221
 gacagcggac aataggaaag 20

<210> 1222
 <211> 639
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 2, 8, 9, 10, 17, 35, 40, 42, 53, 55, 56, 68, 106, 107, 113,

133, 399, 479, 502, 562, 563, 580, 582, 585, 598, 601, 602, 608, 615,
626, 629, 631, 636, 638, 639
<223> n = A,T,C or G

<400> 1222
cnagggtnnn ttgctanttt catcttgtaa cttanttatn tnccgtaaaa acncnnccct 60
tttggagntc gaccgtatcg ataagcttga tategaattc ctgcannccc ttngtgccgc 120
agggagaaaa cancatcggg acagatcaca aatgttattc actcaatgga gctaataaaa 180
cacacacaca cacacacaca cacacacaca ccaaataaat ctttgcaaat tactgtatct 240
gaaccacctt ttgacctgta atttatacac atacttgttt ttaatcaaag catgcagttt 300
gtgattattc agtttcagta accaaaggta aaaaaataac cattatttga actgactcga 360
ctgcatttgt tttatcagaa caaaaatatg ccccatctna aggtgttaca gctttgacct 420
tcactctttt ctaagttttt ccaacaaaga cactgtaaat gttacacaaa atgaaatgnc 480
acgacctggc atttggggga tncactagt ctagagcggg cgccaccgcg gtggagcctc 540
caattcggcc ttatagttag tnngtattac cgcgcgcttn antgnccggg cgttttanaa 600
nngttgtnga cttgnggaaa aacccttng ngtttncnn 639

<210> 1223
<211> 17
<212> DNA
<213> *Oreochromis niloticus*

<400> 1223
gccgcaggga gaaaaaca 17

<210> 1224
<211> 21
<212> DNA
<213> *Oreochromis niloticus*

<400> 1224
caggtaaaaa ggtggttcag a 21

<210> 1225
<211> 805
<212> DNA
<213> *Oreochromis niloticus*

<220>
<221> misc_feature
<222> 2, 11, 13, 19, 232, 417, 474, 476, 505, 511, 518, 535, 539,
542, 550, 552, 559, 563, 573, 574, 578, 581, 601, 604, 610, 625, 632,
638, 655, 656, 663, 666, 675, 677, 680, 690, 691, 693, 702, 703, 705, 706, 716,
719, 722, 724, 727, 728
<223> n = A,T,C or G

<221> misc_feature
<222> 735, 736, 737, 744, 745, 746, 754, 757, 767, 768, 774, 776,
777, 780, 781, 782, 784, 785, 788, 791, 792, 794, 797, 798, 799, 800, 803
<223> n = A,T,C or G

<400> 1225
tnttgaccta nttaatgcnc ttttcaacgc ggccgcggct cgctctagaa ctaagtggat 60
ccccccgtg tgaagctctc cgctgcttgc agtgcaaaaca ggcttacagg actctaggct 120
gtggctgctc ttcagtgtgc tccatgcttt gtgcagaaaa ctgcagctgg tgcatttgtgt 180
gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt ggaggggggg tncagacctc 240
gggttcttca tcatcctgca atgctgctga agcagatggg ctccaggtgct gcagctgggc 300

```

acctctcctc actcatcggc agcaccggcg cttcagtctg acatcaatca tctaaacaca 360
aacatgctcc cgtacctggc gatggcgctc ggggtctctg tctgtctgcg tgtcaantaa 420
agctgctgtc ttatcttgcg gtgctcttgg ctaacattca tcaactgtgc tgtntntgac 480
taactgcatg gagccctctc tgatnaatga naactaantt gctttggatg ttcanaagnt 540
anttaatcan angtttaanc ctntgttaagt ctnttttngg natgtcaaca ctttggggct 600
ncangaaatn catataagct tatenatacc gncaactnca agggggggcc ccgtnnccca 660
acnttntgtt ccttnantgn aggggttaaan ncnccccttg gnncnnaaac aatggncana 720
ancnttnntt cccgnnncaa aaannnttat cccnctnaca atttcennac aacntnnan 780
nncnnaancc nnanaannnn aance 805

```

<210> 1226

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1226

agtgcaaaca ggcttacagg a 21

<210> 1227

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1227

agcattgcag gatgatgaag 20

<210> 1228

<211> 187

<212> DNA

<213> *Oreochromis niloticus*

<400> 1228

```

atcacttggt agccctctac atgcagaagt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt 60
gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtatctgg aaaggctcca 120
ttggggctga aagggtatgaa cagggttttag agaaacatct gctccatgca gatgtgtgtt 180
tcaggaa 187

```

<210> 1229

<211> 22

<212> DNA

<213> *Oreochromis niloticus*

<400> 1229

cacttggttag ccctctacat gc 22

<210> 1230

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1230

tctgcatgga gcagatgttt 20

<210> 1231

<211> 618

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 3, 6, 7, 8, 9, 10, 13, 30, 38, 454, 612, 618

<223> n = A,T,C or G

<400> 1231

```

tgnngtnnnnn tcngattcct tgggtaccgn gccccccntc gaggtcgacg gtatcgataa 60
gcttgatatac gaattcctgc agcccacatg ttagagatgg ctgaggaaca gagagggaga 120
ggtaacggag gacggaaacc acacacacac acacacacac acacacacac acacacacac 180
acacacacac acacacacac acacacacac acagcggtat ttgtttccag cagaatccgc 240
tgcgagagcc gagatgaaaa tcatcaccac actcgagcac agcagcatca ccggtttttg 300
ggggatccac tagttctaga gcggccgcca ccgcggtgga gctccaattc gccctatagt 360
gagtcgtatt acgcgcgctc actggccgctc gttttacaac gtcgtgactg ggaaaaccct 420
ggcgttaccc aacttaatcg ccttgcaaca catnccccctt tcgccagctg gcgtaatagc 480
gaagaggccc gcaccgatcg cccttccaac agttgcgcag cctgaatggc gaatggaaat 540
tgtaagcgtt aatatttttg taaaattcgc gttaaatttt tgtaaataca gcttattttt 600
taaccaatag gncgaaan                                     618

```

<210> 1232

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1232

```

ttagagatgg ctgaggaaca                                     20

```

<210> 1233

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1233

```

attctgctgg aaacaaatac c                                     21

```

<210> 1234

<211> 808

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 3, 10, 13, 17, 21, 30, 131, 446, 567, 636, 639, 657, 720, 725, 726, 734, 768, 780, 799, 804

<223> n = A,T,C or G

<400> 1234

```

tantttgatn cgngaancct nttgaaagcn cccctcgagg tcgacggtat cgatcagctt 60
gatatacgaat tcctgcagcc cccatgacct cacctgaaac cctcaggctt tggttcggtc 120
gccatggagt ncaacacctc catccatacc cgtctcacca ctgctaacga gtgcactcca 180
tttctgcaga tctgtgacac cgctggtctg gaacatctgt ctacaagagt gggtgagtat 240
tcagagagca tattccatcc ctgatggtag tatggacagt ttgagccata ctcagtgtctg 300
tacactgagt ctctctctct ctctctctct cacacacaca cacacacaca cacacacaca 360
cgcagcatga gctgtaagat aggagccacg ctcaagacct aaatgaggct ctgcagagga 420
atcaccacca ggctgaagga gaccgncatc cttcaccaca tcatcactct gcacctgtgg 480
tgacctgatg atgaggtgtg agcatcctcc cctgtagaag acagcagtcg ggggggatcc 540
actagttcta gaagcgggag ccaccgnggt ggagctccaa ttccgcctat agtgagtcgt 600

```

```

attacgcgcg ctcactggcc gtcgttttac aacgtnggng actggggaaa aaccctngcg 660
ttacccaact taatcggtt tgcagtacaa tccccctttc gccagcttgg cgtaaatagn 720
cgaannaggc ccgnaaccga atcgggcctt tccaaacagt tgcgcaancc tgaattggcn 780
aatggaaat tgtaaaccnt taanattt                                     808

```

```

<210> 1235
<211> 21
<212> DNA
<213> Oreochromis niloticus

```

```

<400> 1235
gctggtcttg aacatctgtc t                                     21

```

```

<210> 1236
<211> 19
<212> DNA
<213> Oreochromis niloticus

```

```

<400> 1236
cttcagcctg gtggtgatt                                     19

```

```

<210> 1237
<211> 630
<212> DNA
<213> Oreochromis niloticus

```

```

<220>
<221> misc_feature
<222> 3, 4, 561, 615
<223> n = A,T,C or G

```

```

<400> 1237
tgnntttgac aaccttgggt accgggcccc ccctcgaggt cgacggtatc gataagcttg 60
atatcgaatt cctgcagccc aaagcgacag gtgcacgctc agcctcacgc ccacacactc 120
catataagga cacaggcgca ccgggctgtc acagcaggaa atcaggaggg tttgaactgt 180
cagaggggaa agtggaaaag cttaaacagt ggagctggaa taggctctgc ccccatcacc 240
ctgattacct gttggacttt gtcaggtgt attaaagcag ctggacagat gttagagatt 300
atctctgttt tgactgaaag ctgctcgtca gacacacaca gaccgtaaca cacacacaca 360
cacacacaca cacacacaca cacacacaca cacacacaca gtgtgtatca aattcactgt 420
ttacaaacca tgaatgactc ataccaaaat catcaatatg atcaataaca ctgatgatta 480
ttatcactgt gatcattact gctacgcgtg ttgtgacgca ccagcaccag tgggggatcc 540
actagttcta gagcggggccg ncaccggggg tggagctcca attcgcccct atagggagtc 600
gtattacgcg cgctnaatgg ccgtcgttta                                     630

```

```

<210> 1238
<211> 20
<212> DNA
<213> Oreochromis niloticus

```

```

<400> 1238
tcagagggga aagtggaaaa                                     20

```

```

<210> 1239
<211> 21
<212> DNA
<213> Oreochromis niloticus

```

<400> 1239
caacacgcgt agcagtaatg a 21

<210> 1240
<211> 317
<212> DNA
<213> *Oreochromis niloticus*

<400> 1240
caatgcccct ccaaggacgg gtgagcgcgc gaggagcgag cagagtaatc acagttaaag 60
agagagtgtg tgtgtgtgtg tgtgtgtgtc tgtagggagg tgaataaacg tactacaggg 120
gacacaggaa tggcttggtg ctggaaaaaa tggatgggga tatgaaccga gtggaacatc 180
ctgtcccatc taccattctt cacatacttg cactcacaca cggagcgggt cggtgtgggt 240
atgttggtgt tcttgagcag tggagtagac agatgagtga atccaggata cggaatgtgt 300
tccagtactc caaacat 317

<210> 1241
<211> 20
<212> DNA
<213> *Oreochromis niloticus*

<400> 1241
cgaggagcga gcagagtaat 20

<210> 1242
<211> 20
<212> DNA
<213> *Oreochromis niloticus*

<400> 1242
ctccgtgtgt gagtgcgaagt 20

<210> 1243
<211> 595
<212> DNA
<213> *Oreochromis niloticus*

<220>
<221> misc_feature
<222> 6, 10, 15, 18, 23, 24, 27, 36, 40, 45, 50, 56, 67, 68, 79,
110, 113, 475, 492, 564
<223> n = A,T,C or G

<400> 1243
ttgaantcgn gagcncnngg aannccngtc cctttnggan gtcgncggtn tcgatnagct 60
tgatatnnaa ttctgttnc cctttagcca gaatcggaga aaataaatan ggngaagaaa 120
agcttggtgcg ccacgcacac gtcacacact ccctccagcc tcttggcaag gctgcagaca 180
gcactgcaac caggacacaa tgcctaaaaa tctgcaacta tctggcatat gctcctctgc 240
aaaactctca aggcttcaat acgagccttt ctagtcaagc agactctctg ctcccagtga 300
tgcttagcaa taaaagctct acagaggtct atttatgaat actaaccaca ctcccacaca 360
cacacacaca cacacacaca tccagatagc tgatgaattc gaacagacag agagggacgg 420
tgaggcctga tccctgccat accaatattg ctgtgtgggt gtcagtgtgt gtggncgtgt 480
attacttatt gntgtgggga cacaaatttg ttacacactc acattgtgag gtctcgccta 540
ctttatgggg acaaattgca aggnaaatca ttcaatttta gggatgaaggc ttgac 595

<210> 1244
<211> 21

<212> DNA
 <213> Oreochromis niloticus

<400> 1244
 gacacaatgc ctaaaaatct g 21

<210> 1245
 <211> 16
 <212> DNA
 <213> Oreochromis niloticus

<400> 1245
 cctcaccgtc cctctc 16

<210> 1246
 <211> 351
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 27, 71, 72, 92
 <223> n = A,T,C or G

<400> 1246
 atgaaacaac agtcaggaat aaacggngaa gagcctgagt gggatttagt gatgtcactg 60
 acgcccacatca nngttctcag ttacagcaga tnggcgtgctc cgctgtcggg aaagattttgt 120
 tcaaatttagt gcaaataaat gaggatttttg gaaacaaaca cacacacaca cacacacaca 180
 cacacacaca cacacacaca cacacacaca cacatagatg aaacaaacaa gtgaaggaaa 240
 caagatgccca actgggtatc agaggagtgt gcattggcaac gggtaaagtt gctatgggaa 300
 tggtagtatt aaaagagatg aaagaggaat tatcagcaca gttggaaagt a 351

<210> 1247
 <211> 19
 <212> DNA
 <213> Oreochromis niloticus

<400> 1247
 gatgtcactg acgcccac 19

<210> 1248
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1248
 ccatagcaac tttaccggtt g 21

<210> 1249
 <211> 619
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 9, 48, 405, 416, 422, 474, 479, 488, 493, 497, 500, 507,

516, 517, 520, 534, 544, 553, 581, 587, 591, 595, 599, 600, 607, 611,
613, 617

<223> n = A,T,C or G

<400> 1249

```
acacacctnt acagttcaaa tccactggac acataatgta aaatctgnac cagaatcagt 60
aaaaaaccca caatagtagc gactgcgcca acatatTTTTT ggttggtgtt gtgatgaaaa 120
aagcagacaa tcttactgag cgtagagaaa ctttcatgtg gctctataaa ccaatagaaa 180
ataagcaaaag tgccatacac gagcgtatgc tcacacacac acacacacac acacacacac 240
acacacacac acacacactg cttcaaacgc cgttcgtgtg ttctcatgtt ctggagacat 300
tacacatcaa atgagtcCCA taagctgaag tatttttaga atctgaggat attttgctaa 360
ttcacgcagc ctctttttc tccactgtc aacagcatcc cgctngtgca cacacncggt 420
gnaccgactg caaaatgctg tgagaagtcc aattcgatgc tttttcacca ctgnacaang 480
ggcttcanaa ganaacngan cccaaantga aaaccnnatn cccctgggtt tatnattaaa 540
tctncccaaa ganattttgt ggggggggga ttccccctta ntttttnaaa natgngccnn 600
caccctnggg ngnaatntc                                     619
```

<210> 1250

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1250

```
aaaataagca aagtgccata c                                     21
```

<210> 1251

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1251

```
ctgcgtgaat tagcaaaata                                     20
```

<210> 1252

<211> 534

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 507

<223> n = A,T,C or G

<400> 1252

```
acttgtctgt ctctgtgagg accaatctga gtttgcagcc ttgagactga tgtagttagt 60
cttcactgta ggataaaatc ttcaaaggcg tgcttgaggg ttcagacata gttttaaggt 120
tcagggttcgg ttaaggagct cagtaatgta gtatgtcaac aagagtcctc gcaaagacag 180
aggggaaaaat aagcatgtgt gtgaggatgt gatgctggct gtccgcctaa taagagcaaa 240
gcctcgctga agttggagtg tttgatctca accagtcacc agcagctatg acagatggct 300
ctgactcaca cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca 360
cacacacaca cacagacaca cacacgtaga cacacacacg cagatgagct ttacagtcta 420
accacagggtg taatgtgttg gttttgtgtt cacacagacc ctacttcaca gatcagtggt 480
tgtgttacct tgcagcaagt gaggttnnag ggtgcgatgc tttcaggtat gttt      534
```

<210> 1253

<211> 20

<212> DNA

<213> Oreochromis niloticus

<400> 1253

cagctatgac agatggctct

20

<210> 1254

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 1254

tgaagtaggg tctgtgtgaa c

21

<210> 1255

<211> 607

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 6, 8, 601

<223> n = A,T,C or G

<400> 1255

```

tttganancg ttgggtaccg ggccccccct cgagggtcgac ggtatcgata agcttgatat 60
cgaattcctg cagcccccat gttgacaaac caggattcat gcttttcaag actgtctgtc 120
catccgtgcc aaggaccccc ccatagaggc atagagctac agccaccatg accctgttcc 180
acacacacgc acgcatacac acacacacac acacacacac acacacacac acacacacac 240
acacacacac acacacacac gcctctctca tctgtccttt cacatgtaac ccagcagaac 300
aaaagcaaag gactggaaac acattttccc gtccttatga gcacttcact tcctgtgtgc 360
atatgtctgt ttacatatca ctcttgccct tcatccaaca cgcttacaca aaaatgcatc 420
accatttgtt cccctacttt ttagcccatg cttgtctgta aatatatatg tatgcagctt 480
cttttttcat taggatcaga gtgcaggagc ccaggaacag gtccaagaac tgaaacataa 540
ggagattgga aagaaagcgt tgtgaaattt ggaggggaacc ttcagctttt cacgctgctg 600
ngatgga                                         607

```

<210> 1256

<211> 17

<212> DNA

<213> Oreochromis niloticus

<400> 1256

gtccatccgt gccaaagg

17

<210> 1257

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 1257

ttgcttttgt tctgctgggt t

21

<210> 1258

<211> 542

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 440, 491

<223> n = A,T,C or G

<400> 1258

```

tttgtgccag tgaagcatgt aggtgcatgc ttgtgtgtgt ctgtgtgtat atcgatgtct 60
taggagagac gttaatgtcc tgggagcaga cgcctcacttt ggtgagagta aatataccta 120
aaagcgccct gagagcaaca ggactcttct ctcactgaca caatattatt ctgctgttct 180
tcacaagctc tggggaactc gtacacacac acacacacac acacacacac acacacacac 240
actttctctc tctctatccc accaggcttg tttatgagtg tgattacaca gagagaggtc 300
cggttgtcca gctcacctga gagcgcatca ggtgcagtg cctggggcct tgtgcctgtt 360
tgtgtttgga cagtgcctgtg tatttttggga acggcacact ttttgtgcct gacagtgagt 420
tttttggttt tgtttcctgn tttattcctt ctgttactgt gtgaaaaaga gatatagtgt 480
ttgtttaagg ngtcccatgt tgggttagat gcccctaaact tctgggggtcc taaaattcaa 540
cc

```

<210> 1259

<211> 16

<212> DNA

<213> *Oreochromis niloticus*

<400> 1259

```

cgccctgaga gcaaca

```

<210> 1260

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1260

```

agtgtgccgt tccaaaaata c

```

<210> 1261

<211> 608

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 2, 5, 10, 20, 44, 433, 457, 462, 464, 469, 473, 475, 476,
493, 501, 508, 515, 522, 525, 526, 533, 534, 536, 537, 550, 554, 560,
572, 583, 585, 593, 603, 605, 607

<223> n = A,T,C or G

<400> 1261

```

tntnttggg agtagatctn ttggaatccc ccgtgggtgtt tggncgctct agaactagtg 60
gatccccccc ggtcctcgtg ctctgggtgga cgtagcctg ctagctgcct ccattcatta 120
gctttattcg cacaacaaca acaaagcatt gctgctcccc agatgcagcc cccaaaacac 180
acacatacga aagcacacac acacacacac acacacacac acacacacac acacacacac 240
aactgcctac cacaactacc accaccact gccaccacct cataaccatt ttttccattg 300
tgtgttcttc tccccctcgt tctctccctc tccctctctt catgataaca acaacagagt 360
tgaagcctct tgaaaaactc actttgaata tcagattggc tttgtgtgtg tgggcagggg 420
atgtttggga agntgttgac atttttgggt agacagnttg gncnctacnt ttngnnctta 480
ctttatgggt tngngcccct ntgaaaangg gtttncatgg anatnncagt cttnannttt 540
actttaaggn ttttaggggn cctgtcccct tnccccgccc gcnnggttt aangaaattt 600
tgntntna

```

<210> 1262
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1262
 tagctttatt cgcaacaac c 21

<210> 1263
 <211> 18
 <212> DNA
 <213> Oreochromis niloticus

<400> 1263
 gagggggaga agaacaca 18

<210> 1264
 <211> 474
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 461
 <223> n = A,T,C or G

<400> 1264
 tagactacga gcagatatga tgggaataac aatatctgga gtcccgattc aactgtctga 60
 tccttatctc tgcctgtatg attctgacat tttcagatgt tattactcac actcaaggat 120
 ttgtatccta aagcctcgac agtgacgacg gcgctcaaca gaaatgctgc atgtgcacaa 180
 atcccacggc tctaccccct atccgcacac acacacacac acacacacac acacacacac 240
 acacacacac acacagacag aaacaccctt gacagagatc tgtgagccat tcttcagtgt 300
 cacagtgcgc gacgcctggc acatccttat acctgaagtt gatcaatgca gatatgtcca 360
 ggggggaaatt gaaatccata ggaaattagg cggcgcaagt gatttattgg aacagttaa 420
 catggtgcgt gtgatgtgtg gagagtctgt gttccagctt ncgtagcgcca tact 474

<210> 1265
 <211> 18
 <212> DNA
 <213> Oreochromis niloticus

<400> 1265
 acggctctac cccctatc 18

<210> 1266
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1266
 cgcctaattt cctatggatt t 21

<210> 1267
 <211> 270
 <212> DNA
 <213> Oreochromis niloticus

<400> 1267
 tgcagctgac cttcactctt atctcactta tggctgctaa catgcctgat ggatgtttcc 60
 ttattgtttg tacagactga cccgtgtgga atctgtttac aagacttggtg tgtatatatg 120
 tgtgtgtgtg tgtgtgtgtg ttaggggggg tctgggcttt catgctgtct gctcagttgt 180
 atccacact actgaaaaaa aaccacacac acgatactga aatgttccta taactgggat 240
 tttagagaaa ttgaaacagc atattagtct 270

<210> 1268
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1268
 tgcagctgac cttcactctt 20

<210> 1269
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1269
 tgagcagaca gcatgaaagc 20

<210> 1270
 <211> 232
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1270
 cccagataaa gcatgtcagc aatataatat ttacacctaa gaaaatacat cacgatataa 60
 agtaaaaaaa acaaaacatc caactctatg tacttgcatt caagggataa cctccaaacc 120
 agagagctat tttagcacag attacataac gtaagataat cacatttggtg atgttctcac 180
 acacacacac acacacacac acaccaacaa caacaaagat taattacgag gg 232

<210> 1271
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1271
 cccagataaa gcatgtcagc 20

<210> 1272
 <211> 25
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1272
 ccctcgtaat taatctttgt tgttg 25

<210> 1273
 <211> 601
 <212> DNA
 <213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 4, 5, 7, 8, 9, 10, 11, 14, 22, 23, 26, 27, 32, 35, 40, 42,
50, 54, 59, 80, 83, 84, 105, 128, 133, 383, 435, 462, 538, 545, 548, 569,
572, 573, 574, 576, 579, 598, 600, 601

<223> n = A,T,C or G

<400> 1273

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aggnnngnnnn nagnttatct tnnatnnggg gnttnaaggn anccttcccn ctantgggna 60
acgaccctat cgataagctn ganntcgaat tcctgcagcc cattnaccat caaacagaca 120
cttcattngg ggngcagtga taacaaatac attgtgtagg ataatgatgg cagtgggtca 180
tattgttcat tatacgtctg ggtgtcatac ggcaattgca aatttatacg tctgtgggtg 240
cttgtgtgtg tgtgtgtgtg tgtgtgtgtg tgcgtgtgtg tgtgtgtgtg tgcgcgtgtg 300
tctttgtttt tgtcattttc atgtttcagc aaattaacgt ctgaaccatt gggaagaaaa 360
atataccatc atttgccatt ggngacaaac aatatatttt ggataatgat tgcattctatt 420
ggcttctgca tttgnaaatg tgaggtaatg aatttccttt gngagcaatg aaagcaaaca 480
gacatattat gtcactttgc ttgaacaggg ggggatccac tagttctaga gcggccgnca 540
cccngngngg actccaattc ccctatagng annncntant acgccgctca ctggcccn 601
n
```

<210> 1274

<211> 19

<212> DNA

<213> *Oreochromis niloticus*

<400> 1274

```
ggataatgat ggcagtggt 19
```

<210> 1275

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1275

```
tatttttctt cccaatggtt c 21
```

<210> 1276

<211> 611

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 2, 3, 4, 6, 7, 8, 9, 11, 13, 15, 19, 31, 611

<223> n = A,T,C or G

<400> 1276

```
tnnntnnnnn nanntatcnc ttggataccc ngccccctct cgaggctcgac ggtatcgata 60
agcttgatat cgaattcctg cagcccactt tttattgcca ttgatttggt gacactgaaa 120
aaagagagag atgtcttaaa acgtttgaga tctgacacac acacacacac acacacacac 180
acacacacac acacacagag gagccactgt ttgccgtgca agtttttact cgcagtccttg 240
gggttgatg aagtttattc gagactttcc ctgacatccc ccgcctttac agtttctgta 300
tcttactgtg ctcgggatta gttctttcat gccattttgt tgggctttga tccctgacca 360
cattgatctc aaggcatgac tagataacgc tcgccccagt ttttcctttc cctcctcaag 420
atacatctct gaagaatagg cttgcattac cctccagcca catcttagat ttttttttta 480
accagcccac tttttttcat gagcatataa tccctgtttt ttgggggatc cactagttct 540
agagcgggcg ccaccgcggt ggagctccaa ttcgccctat agtgagtcgt attacgcgcg 600
ctcactggcc n 611
```

<210> 1277
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1277
 gccattgatt tggtgacact 20

<210> 1278
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1278
 aaaatggcat gaaagaacta a 21

<210> 1279
 <211> 404
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 351
 <223> n = A,T,C or G

<400> 1279
 gagagcgtac cttagctgac gcaatgatct ggcgatgact gagtgtttgc ttcagcctta 60
 agtagtgagc ctgataacca gtgagccgca ggtgagtaat cacagctgat tgccagcagc 120
 tgcgtgcaca gaggaagggtg gagagacaag agaagccaca ctgaggggtgg gatgcacaac 180
 catgcctaca cacagactca cacacatgca ctcacacaca cacacacaca caccagggga 240
 gaaaaacaac tacagagaca caaaaaggaa aggagggcaa gcaggagaca gtaactatcg 300
 agctcctctc ctcataaaaa tacactggaa tgtgtcactt ctgttggttg nttagaatca 360
 caggtttact ttagtaaaact aaattattta gacagccaat ctaa 404

<210> 1280
 <211> 20
 <212> DNA
 <213> Oreochromis niloticus

<400> 1280
 gtgcacagag gaaggtggag 20

<210> 1281
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1281
 ccctcctttc ctttttgtgt c 21

<210> 1282
 <211> 620
 <212> DNA
 <213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 6, 12, 36, 42, 470, 471, 474, 479, 487, 493, 501, 504, 515,
531, 533, 534, 539, 541, 543, 549, 552, 555, 559, 560, 569, 573, 579,
580, 581, 584, 587, 588, 592, 595, 603, 606, 608, 609, 617, 618

<223> n = A,T,C or G

<400> 1282

```
tctatntttg anagcgatct ctttggaact ccccnccggt tncggccgct ctagaactag 60
tggatcccc cccactcata taaacacagc aaaagtgcata ctcacatcag tgctaacatc 120
ttaaagatat gcatattaat atagatattc acagttccac ttttagtcag acagaattta 180
tttgtttctg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtagt 240
gtctcagtggt tactgatgga gctgggtgctg agaaacacat ttgacttgag tgtggaaatg 300
tcagtcgctt tgattactgc acttaggcag ctgtgacatt tttcactact ttacgtgcac 360
tcaacgcaaa ggtcaaaaca aaaaggaccg ggccgtgctct atttcccaaa cctatccagc 420
cagcgccctca tgggattggg ggtgccctg cccattgcct ctctccctan ntgnnggggna 480
gccccncac ccncttatct natnctaacc ctctnaaccc tctttggctc ncnnattcnt 540
ncntccccnt tnttnagcnn tctatctcnt aantgggtnn nccnctnnat cncnnaaacc 600
ttnatntnna tatctcnncc 620
```

<210> 1283

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1283

```
cccactcata taaacacagc a 21
```

<210> 1284

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1284

```
cgactgacat ttccacactc 20
```

<210> 1285

<211> 671

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 2, 3, 4, 5, 7, 8, 11, 12, 13, 16, 17, 18, 21, 22, 23, 25,
26, 34, 36, 38, 47, 94, 452, 528, 583, 585, 599, 603, 610, 618, 621, 623,
626, 627, 631, 633, 635, 640, 641, 643, 649, 666

<223> n = A,T,C or G

<400> 1285

```
gnnnngnntt nnnttnnnct nnnanntctt tgggnancnc accgcgntgg cggccgctct 60
agaactagtg gatccccccc gccgtcttct cctntgacgc caggtctgtg cagtgggatg 120
ccgggtaaa ccccgggaga ggcagcgctg tttccctgct gtttccctct tcgtgttaag 180
acacgatcgc ggttcagttg aaaagaatgg aggagatggt aataaagggg aatatcagtc 240
agaaggcaca cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca 300
cacacacaga gttcagctgt ctgaacacga aaagctgata aggtgttttg ggctgcagga 360
attcgatatc aagcttatcg ataccgtcga cctcgagggg gggcccggta cccagctttt 420
gttcccttta gtgaggggta attgcgcgct tnggcgtaat catggtcata gctgtttcct 480
```

gtgtgaaatt gttatccgct cacaattcca cacaacatac gagccggnag catacaagtg 540
 taaagcttgg ggtgctaatag agtgagctta ctcacattaa ttngngttgg gcttaatgnc 600
 cgnttttcan ttgggaanac ntnttnngcc nantnttttn nanaaattng cccccccggg 660
 ggggngggcc t 671

<210> 1286

<211> 17

<212> DNA

<213> *Oreochromis niloticus*

<400> 1286

ccctgctgtt tcctcct 17

<210> 1287

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1287

ccttatcagc ttttcgtgtt c 21

<210> 1288

<211> 475

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 420

<223> n = A,T,C or G

<400> 1288

gggaatagca cagtgtcctg ggtgacatgt cacaaagcat agggccttaga gagaacacac 60
 acacacacac acacacacac atcctcaaaa tcaaaccat ctctctgata gcactgctgc 120
 caccacaacac agctcctgct taaattaagt gttttgatta ttcagtaagt gtacgtacat 180
 ttcattccta taagccagag ggaaggaagg aaggcgtgag tgacaccaga ggtcagcaac 240
 actcactgca gctatactta cattttacaa ggattacatc tgctcagtga taagcagtct 300
 ttgtttatgt aatcaataaa gcagcacagt ttggaacagt gtgggacttc agcaacctga 360
 ttaccagctg tctaactggc tgactcgagc ggctgtgggg gaacagcagc cccaataatn 420
 cagtcgaggc agagagagct cggagggagt attccgttta gcggtgacca gcctc 475

<210> 1289

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1289

tagcacagtg tcctgggtga 20

<210> 1290

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1290

gtgtcactca cgccttcctt 20

<210> 1291
 <211> 664
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 2, 3, 14, 19, 460, 565, 582, 592, 617, 637, 645, 654, 655,
 664
 <223> n = A,T,C or G

<400> 1291
 tnntttgatc cgtnaatcnc tttgaaccgg cccctccctt taggtcgacg gtctcgataa 60
 gcttgatatac gaattcctgc agcccactgc tatccattga cagatattga gttttccctt 120
 catgttgctg ccatcacctc ttgcttatca tgctcactct tttgcagcta taatagcagt 180
 atgtcactgg ctaccatgta tgcacacaca cattatacag tgacatatac acattaatcc 240
 ataagatatg ctaattgatt atataaaaaga catagtcttt ccttcgtgtg tgcacacatg 300
 cacacacaca cacacacaca cacacacaca cacacacaca cactactaaa catgcacaca 360
 taacctctgc cctaactcac agtggttcttt gtctctaata gctgctaact catttagcac 420
 ttcattgttag agagagagtg gagtctgagt aggagggggn ggatccacta gttctagagc 480
 ggccgccacc gcggtggagc tccaattcgc ccttatagtg agtcggtatt acgcgcgctc 540
 actggggccgt ctgtttttaca acgtngtgac tggggaaaac cntgggccgt tncctcaact 600
 taaattgcct ttggaancac attccccttt tgccagnttg ggcgntaata gccnnaaaag 660
 gccn 664

<210> 1292
 <211> 17
 <212> DNA
 <213> Oreochromis niloticus

<400> 1292
 gccatcacct cttgctt 17

<210> 1293
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1293
 gagttagggc agaggttatg t 21

<210> 1294
 <211> 647
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 2, 6, 7, 8, 10, 11, 14, 15, 23, 24, 30, 34, 43, 47, 48,
 81, 462, 468, 470, 472, 488, 506, 514, 517, 527, 529, 531, 533, 543, 549,
 551, 561, 565, 569, 574, 576, 578, 580, 582, 584, 587, 595, 602, 608, 609, 611,
 612, 613, 614, 615, 617
 <223> n = A,T,C or G

<221> misc_feature
 <222> 618, 620, 621, 627, 628, 632, 634, 636, 643, 647
 <223> n = A,T,C or G

<400> 1294
 gngagnnnngn ngannttgta ttnggtctan aaanacttta ttnaaannct cccccctttt 60
 gaggaagac gcccgtcggg nagcttgata tcgaattcct gcagcccaaa atttctaaaa 120
 agtcctctgt tacacatcca cttacacccc ctgtcacttc atgcacacac acacacacac 180
 acacacacac acacacacac acacacacac acacacattt atgtatagaa atacatttca 240
 gcgtacaact taatatatta aaacagaagt tgatctctcc agttatacaa cggattagct 300
 catttagcct tttaggtatg cactgcctct tttcatcatc aagtcggtg tccctctgca 360
 gatcttcact cctttgtttg ttacagtcag ctttatagaa gtgaccaat cataaaaccc 420
 ccatggagtg ttgcaaacctc tgtgtttgtg tgtgtatgtg cnaacacntn antgcctgtg 480
 tgtgccnta cccgtgtgtc tatgtnagtg cacnttnaat gactgtntnt ncntacctgt 540
 gtntatgtnt naatgcacct naatnaatnt cctntngntn tntnaantgt aacanttaaa 600
 ancactgnnt nnnntntntn nttttgnnca cntnantttc ctncnccn 647

<210> 1295

<211> 23

<212> DNA

<213> *Oreochromis niloticus*

<400> 1295

ccacttacac cccctgtcac ttc 23

<210> 1296

<211> 25

<212> DNA

<213> *Oreochromis niloticus*

<400> 1296

acaccggact tgatgatgaa aagag 25

<210> 1297

<211> 621

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 11, 16, 20, 23, 26, 88, 116, 118, 121, 409, 561, 570, 589,
 592, 594, 603, 604, 611, 612, 614

<223> n = A,T,C or G

<400> 1297

ttctcttggt nctacngatn ctnggnattc ccgccccctt cgaggtcgac cgtatcgata 60
 agcttgatat cgaattcctg cagcccantt acattttttt gaatgcattc agtttngnag 120
 ncaaatactt attttcaggt attctgcttt caagagtaaa agtttaattt gtttcacctt 180
 acctagactt ttcctttctt ctttactggt ctattttttt ctataactgc cccacacaca 240
 cacacacaca cacacacaca cacagagtca tgcaccctcc tctcccgttc agcctttctt 300
 tttcctcccc tgccctcctt ccttctcctc atcactgaag gtgtcaggac tctaacgctg 360
 cagtgccatc tgggggggga tccactagtt ctagagcggc cgccaccgng gtggagctcc 420
 aattcgccct atagtgaagc gtattacgcg cgctcactgg ccgtcgtttt acaacgctgt 480
 gactgggaaa accctggcgt acccaactta atcgccctgc aagcacattc ccctttcgcc 540
 agctggcggt aatagccgaa naggccccgn acccgatcgg ccctttccna anantttgcc 600
 canncctgaa nngnccaaag g 621

<210> 1298

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 1298

ttcagttttt cagccaaata c 21

<210> 1299

<211> 18

<212> DNA

<213> Oreochromis niloticus

<400> 1299

ctgcagcggt agagtcct 18

<210> 1300

<211> 620

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 3, 13, 455, 620

<223> n = A,T,C or G

<400> 1300

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ttntttgacg acntggagct ccccgcggtg gcggccgctc tagaactagt ggatcccccc 60
cgtagggata gaatatctaa tatagaggag ctctgtgtat ttggacactt ccacctttac 120
tttgacagac agacctggac aagcacacac aaaaccagc cacataccaa ctgtggaaaa 180
catctcacac actctactct ttttcttaaa ggtgcatctc ttacacacac acacacacac 240
acacacaagc aggcacatgc aaaaatgtgg acacacattg caaaaacatg caatttggac 300
aataagccct gttctccgta cagaatggca tgtatgtgcg caaaactaca caagaggtga 360
gacggttcga tgagaagcta catgaaagat gtaaaagggg gctgcaggaa ttcgatatca 420
agcttatcga taccgcgcga cctcgagggg gggcnccggt acccagcttt ttgttccctt 480
ttagtgaagg gtttaattgc gcgcttgggc gtaatcatgg tcatagctgt ttccctgtgt 540
gaaaaattgg ttatccgctc acaattccac acaacatacg agccggaaga taaaagtgtg 600
aagcttgggg tgctaaatgn 620

```

<210> 1301

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 1301

cacttccacc tttactttga c 21

<210> 1302

<211> 18

<212> DNA

<213> Oreochromis niloticus

<400> 1302

ggagaacagg gcttattg 18

<210> 1303

<211> 331

<212> DNA

<213> Oreochromis niloticus

<400> 1303
cctggagagc ggaaaacttg gcgggatatt cgtgttctgg gcaattagga atgttgga 60
cctgaactga aatctgcttt tggaggagca ctcaatctgt cactcacagt caaaacacag 120
cacggaaaac tcatccctgc acatggttca aacttgcaca cacacacaca cacacacaca 180
cacacacaca cacacacaca gacacacaca cacacatgca ggcactagag tgaaaaccac 240
aactcaaatg cattaatgta cacctttaac aagtgcctga aaatactcgc acccacagat 300
aaccaggggc tagttagacc acccccgatg g 331

<210> 1304
<211> 20
<212> DNA
<213> *Oreochromis niloticus*

<400> 1304
acagcacgga aaactcatcc 20

<210> 1305
<211> 20
<212> DNA
<213> *Oreochromis niloticus*

<400> 1305
tagcccctgg ttatctgtgg 20

<210> 1306
<211> 629
<212> DNA
<213> *Oreochromis niloticus*

<220>
<221> misc_feature
<222> 1, 2, 3, 4, 5, 6, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18,
19, 20, 24, 25, 28, 30, 32, 37, 40, 50, 52, 57, 62, 545, 615
<223> n = A,T,C or G

<400> 1306
nnnnnnngnn nnnnnnnnnn ttannntntn tntttgnagn ggatcttaan gngaacnctc 60
cnccctttcg aggtcgacgg tatcgataag ctgatatcg aattcctgca gccccctgaa 120
aatcttctct gatgaactgc actaagaata gggtccttta tgagtctcat taccaaacc 180
aaactgtttc aggcagagct gtgcgagaca ccccgacaag tcctggtaat tatctttagt 240
gagcggagcg cgacacactg ctgtcgcttc atgaacacat agcacagagc taaccgctca 300
gagagattac aggtcatgt gcatcaaaga cgagcacgca ctcacacaca cacacacaca 360
cacacacaca cacacacaca cacacacacc gttaataca catgtccact ttgctgatgt 420
aaaccaatth ttttcttttt ttgggggatc cactagtctc agagcggccg ccaccgcggt 480
ggagctccaa ttcgccctat agtgagtcgt attacgcgcg ctactggcc ggtcgtttta 540
caacngtcgt gactgggaaa accctgggcg ttacccaact taatcgcctt gcagcacatc 600
cccctttcgc agctnggcgt aatagcgaa 629

<210> 1307
<211> 18
<212> DNA
<213> *Oreochromis niloticus*

<400> 1307
aaagacgagc acgcactc 18

<210> 1308

<211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1308
 ggtttacatc agcaaagtgg a 21

<210> 1309
 <211> 765
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 9, 10, 19, 20, 579, 590, 614, 627, 653, 668, 675, 698, 702,
 706, 733
 <223> n = A,T,C or G

<400> 1309
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 aattagccaa tacaacatgg caaacaacac aagtagaatg tatcattaac atgcccgttt 120
 cagactgcat ttcattttgc caatatgagt atgtttaact gcgcaggctc tcattgtcgt 180
 cagcagctgg tttttathtt aatgaatctg actggagcct gaaccagagg tcacttccac 240
 tctgcagcag aacaaaagctg gaacattggc tccacacatc agaaagatgg aacgaggctt 300
 tgttggtgtg agagacgagg agaattgtgt cacatgcaca tacccttttt atagacgtgc 360
 aagggtcat atgcacacac acacacacac acacacacac acacacacac acacacacac 420
 acacacagag aggacgttca actgtttata aaagaagcat tttacaaagg cttcaacata 480
 taaagaaaaa cgtgtcagtc tgcagaaaagc actccctcag tgcttcctgt tttagtagat 540
 taggtttcag aaatcacaaa ctgtatgcaa gcagtggang tgggctgcan gaattcgata 600
 tcaagcttat tganaccctg cgaactngag ggggggcccgt gtaccagct ttnggtccct 660
 ttagtgangg gtaanttgcc ccttggcgta atcatgggna tngctnttcc ctgggtgaaa 720
 atggtatccc gtnacaattc ccacaacttt cgagccggag cttaa 765

<210> 1310
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1310
 tgttgtgaga gacgaggaga 20

<210> 1311
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1311
 gttgaagcct ttgtaaaatg c 21

<210> 1312
 <211> 605
 <212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 1, 8, 12, 14, 15, 17, 18, 19, 511, 560, 605

<223> n = A,T,C or G

<400> 1312

```
ntttgatncg tnanncnnnt ggaaccgcct ggcggttcgc tctagaacta gtggatcccc 60
cccacacagt gggacacaac atcgtagttc atttatcctg acggcactct cgtagaagtg 120
ctgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gaggtgtttg 180
gggctcaaga agaaaaaaaa agaacccccca gcatgtgtgc tttggaaagc tgggtattca 240
tcacaccttct ccacacggtg tgagctccaa agagcgggag cggcgagatg agaggagagc 300
agagatcggg aaatataggt ctgagatcag tgataacaag gcaatctcac acatggtttc 360
atgtgagatg gtggaggaat tttgggctgc aggaattcga tatcaagctt atcgataccg 420
tcgacctcga gggggggccc ggtaccagc ttttgttccc tttagtgagg gttaattgcg 480
cgcttggcgt aatcatgggc atagctgttt nctgtgtgaa attgttatcc gtcacaatt 540
ccacacaaca tacgacctgn aagcataaaa gtgtaaacc tggggttgccc ctaatgatga 600
gctan 605
```

<210> 1313

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1313

```
cattttatcct gacggcactc t 21
```

<210> 1314

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1314

```
tttccgatct ctgctctcct 20
```

<210> 1315

<211> 477

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 468

<223> n = A,T,C or G

<400> 1315

```
atctggagca gagagcagag accctgacac acggctgtca cccgaggcag acacgcagag 60
atgtggacat agacaaagtc tgccccctg tttctgcctc cgcttctgtc tatctgacac 120
acacacacac acacacacac acacacacac acacacacac acacacacac acacacacac 180
acacacacac actctttcac tcacatgtaa gtgacagcag aatggagatt ggtgagtcaa 240
acggaagatg atggtgagaa aattcctgag gattttacca ggaggaaaac tgaattgcta 300
tccacctaaa aatccctccc caaataaagt gcttgctctt tgatggggca gaaaagttga 360
aaaacagtaa gtagactttt ttaatatgaa gacaggttgt aagcagacta ttgtcatgta 420
tgctggtatg ataaaccatt aaaccaccaa cattattgat cagtcttncc aatgaaa 477
```

<210> 1316

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1316

cagacacgca gagatgtgga

20

<210> 1317

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1317

tcttccgttt gactcaccaa

20

<210> 1318

<211> 780

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 3, 4, 15, 18, 44, 45, 519, 573, 631, 636, 664, 667, 670,
685, 689, 692, 704, 710, 713, 715, 730, 736, 749, 752, 762, 763

<223> n = A,T,C or G

<400> 1318

ttnnaagccc ttggnagncc ccctcgaggt tgacgggtatc gatnngcttg atategaatt 60
cctgcagccc ccttccactg ttgaagctgt cacaggattt gatagaagag catatgattg 120
ctacacctgc acttgcttgc ttttcacttt tcacctcttt agttacatta aaaagtctca 180
gtttgttttg cttacacaca tgcttgaaaa gacacactta tctcactcac acacacacac 240
acacacacac acacacacac acacacacac acacacacac acacacagac gtctcacctg 300
ttttactagg taaggctcaa aacggatcat ctaagccaat cacctttcag gaagcaggga 360
tcagcaaaaa tctcctcaat taatagctaa agtaaccttc agtgacctga ctgtggtcta 420
ccacaaacac acccacactt acacacagac atgcgcgcac ttacacacac actctctctc 480
tattgtcggg ccattttacca ttagtctggg atttttttnt attcatttga gtatagctta 540
gtattagtaa acatgtgagg aacaggatca agnatgtgag gcacatctat ctatctaaac 600
tgtaaggggtg gactgacctt ttccctacct ntagnngctt agatgaaaag atgaatgcct 660
gtcngngn gtn aacaccggat tttnttttng gnaacaaaaa ctgntggacn ttntngctgg 720
cagcaaccn tccttngata ggactgaana gnccctgtc tnnaactggg tttttatttg 780

<210> 1319

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1319

catgcctgta aaccttttcc

20

<210> 1320

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1320

atccagcgtt tacagagtga a

21

<210> 1321

<211> 386

<212> DNA

<213> *Oreochromis niloticus*

<400> 1321
 cccggcaatt acagcgtggt gttcacgaag gacgactttc caaagaaatg tgcgcagagc 60
 agagattcag atttttcagcc tttgctcgct gagctgtgat ctgcaggggt tcatgattct 120
 gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt ccaggtcaga cgtgtgaccc 180
 cagctgtcat aacagctcgt gctgggcagc aggacaggat cactgtcaga gatgtaagca 240
 cacactcctt cctgctctca cacagtcggt ctctgtacgt tcaaagtcag gatgatggta 300
 cgtgtcgatt gtctctctct ctctgtctgt ttctgttagt caccaagctg ctgtgtgcag 360
 agcagtgcag ctggagggtg cggggg 386

<210> 1322
 <211> 19
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1322
 gcgcagagca gagattcag 19

<210> 1323
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1323
 agcaggaagg agtgtgtgct 20

<210> 1324
 <211> 320
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1324
 ttcctcagca gcctgctcaa cttcagcaag gtcacacaca cacacacaca cacacacaca 60
 cacactggta ttattatact tgttccagct gcagcataaa cctgagtttg agtcctcatg 120
 ttcattgaagc ttcacacact ctattgaaga agtgacagat ggacacacgc tgacctcaca 180
 cactcagatg tgtgtgtgctg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgttag 240
 ggggaaactc ccctctcatg gtctcatcac ctgctgtctc tccgtgtgtc acataacctg 300
 taagctgtgg atctctgagg 320

<210> 1325
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1325
 cagctgcagc ataaacctga 20

<210> 1326
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1326
 tcagagatcc acagcttagc a 21

<210> 1327
 <211> 639

<212> DNA
 <213> *Oreochromis niloticus*

<220>
 <221> misc_feature
 <222> 1, 2, 5, 6, 7, 8, 12, 17, 536, 578, 585, 591, 594, 618,
 619, 639
 <223> n = A,T,C or G

<400> 1327
 nnttnnnnct antaacnctc ttttggacac cgggccccct ctcgaggctg acggtatcga 60
 taagcttgat atcgaattcc tgcagcccc ctacagtgt tactgactaa ttttaacaaag 120
 taacaacaaa caaacaaaac attgaaacaa aatattaacc aacaaataaa cttgtaaata 180
 aacccccaaa tataagtaaa ctaacaacaa actttaacta attcaaaaaat aataaaaaaaa 240
 taagaacaaa tggctccaac aattagtaaa tcttaaaagc taaagcactg tgtgtgtgtg 300
 tgtgtgtgtg tgtgtgtgtg tccatgtcca tgctgtccag tctcttttcc agctgctaga 360
 acacacctgt tcaacatcta ttcagtcaat catgtttatt tcgcatctac ggacacatta 420
 tagacgtctt ttatcaggct gtagagcgat aagctttgat ctttttttag tctataaatt 480
 tgtcaaatgg catttttctt gggatgaatt taaaagcctc aagtgaaaag gatgcnttaa 540
 attaaaattt tggaaatacc attaaaaatg gcaatggnaa gagcnccaat nttngggatt 600
 gcaatgggaa aaatgccnng cttttacacc tttaaattn 639

<210> 1328
 <211> 21
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1328
 acttgtaaat aaacccccaaa a 21

<210> 1329
 <211> 19
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1329
 ccgtagatgc gaaataaac 19

<210> 1330
 <211> 449
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1330
 ttctgtctgg taaaaggtta tgagcagagg tgcgagggtg gacaaagtgc agctgaggtc 60
 gtgacataca cacacacaca cacacacaca cacacacaca cacacactta gcagattgta 120
 ggtaagagggt tagacatatt ttgcttgcaa actgcatttt gtgcttgcat aagttacaga 180
 ttgtgcagga ctgtgcctga tgggtccagac gataagcgag cgtccggcag cgacaggaag 240
 cacctgccgt ggagacgagg cgatgttctt ttttaactgt gtcacaagt gtcaacagaa 300
 tatttgtgggt tttgacgttt gtattaaatg acttctaaag tcacagcagt tggactttct 360
 gtttctgaca gaaacctggc ttcaacccgg tgagtctgta gctttttcgg aactgggttcc 420
 tcctaatttc tcattcttca gtctccctc 449

<210> 1331
 <211> 20
 <212> DNA
 <213> *Oreochromis niloticus*

<400> 1331
ggtgcgaggt gagacaaagt 20

<210> 1332
<211> 19
<212> DNA
<213> Oreochromis niloticus

<400> 1332
gacgctcgct tatcgtctg 19

<210> 1333
<211> 618
<212> DNA
<213> Oreochromis niloticus

<220>
<221> misc_feature
<222> 28, 595
<223> n = A,T,C or G

<400> 1333
tttgatgccc ttggetcccc gcggtggngg ccgctctaga actagtggat cccccactga 60
tgggcaaact gaccaaata cctcttcgtg cacacacaca cacacacaca cacacacaca 120
cacacacaca cacacacaca cacaacaaa actcctccca gctccccac gacactctaa 180
cttctaata actcacacaa acatatgtat tcacacacat aatacacccc ctccacccaa 240
acacacacac atacagacac ttacagcccc cccaccccca cccctcgagg gaatagatca 300
gcaggagatg aaagggtgagg gggctgcagg aattcgatat caagcttatc gataccgtcg 360
acctcgaggg ggggcccggg acccagcttt tgttcccttt agtgagggtt aattgcgcgc 420
ttgggcgtaa tcatgggtcat agctgtttcc tgtgtgaaat tgttatccgc tcacaattcc 480
acacaacata cgagccggaa gcataaaaagt gtaaagcctg ggggtgcctaa tgagtgcgct 540
aactcacatt aattgcgttg cgctcactgc ccgctttcca gtcgggaaac cttgntcggg 600
cagctgcatt aatgaatc 618

<210> 1334
<211> 19
<212> DNA
<213> Oreochromis niloticus

<400> 1334
gcaaaactgac caaatgacc 19

<210> 1335
<211> 21
<212> DNA
<213> Oreochromis niloticus

<400> 1335
ggggctgtaa gtgtctgtat g 21

<210> 1336
<211> 262
<212> DNA
<213> Oreochromis niloticus

<400> 1336

```

tgggatttat agatcatctc cctacagctg tcccttctca tccccgaacc ccaccctccc 60
ctcccctccc caaacacaca cacacacaca cacacacaca cacacacaca cacacacaca 120
cgctaataatt ctgagggtca tgattccaca tccaaaccca tctacatctc ctgtttttgt 180
gtgtgatctt tggagtcagt gaactgggtc ttggggagtcc agaacagtaa tgctatctgg 240
aaccggtg agctagaaac aa 262

```

```

<210> 1337
<211> 20
<212> DNA
<213> Oreochromis niloticus

```

```

<400> 1337
acagctgtcc cttctcatcc 20

```

```

<210> 1338
<211> 20
<212> DNA
<213> Oreochromis niloticus

```

```

<400> 1338
tgttctggac tcccaagacc 20

```

```

<210> 1339
<211> 651
<212> DNA
<213> Oreochromis niloticus

```

```

<220>
<221> misc_feature
<222> 2, 4, 11, 16, 20, 22, 24, 33, 36, 62, 118, 440, 441, 444,
      445, 535, 537, 581
<223> n = A,T,C or G

```

```

<400> 1339
tntntggtcc ncgtgntctn angnaatgct cncncttta ggtaaaccggc ctcgataagc 60
tngatatcga attcctgcag cccccggagt tggttgaact ttgacttaat tgcagacnng 120
gcgctgggtg gtgtcaggct cagcgacaga gcgggagatg gaggtggaca gatcgccaga 180
ctgctgtttg aaattgtatt catgcctctg gtgttctgtc tccttcttca tcgtgtcctc 240
gctgctcttt tctcactttc tttctttctt ttattctctc ctccctttgc tctcgctctc 300
tgccccccctc cccttgtcat atttataatg cgtttgccctg cagggcattt ttctataacc 360
tgaccttgca acagagcgac tgtaggacac gattatagtg atgcaaccac tgtgtgtgtg 420
tgtgtgtgtg tgtgtgtgtg nggnnggtat gccagcctct cagccattct tagcatcatg 480
ctgcaggcgc tgtgtaacag ctgcatggag aatgtcctgg actgctctga gaggnanagg 540
ctgctgcaca gtggggggga tccactagtt tctagagcgg ncgcaccgcg ggtggagctc 600
caattcgccc tatagtggag gtccgaatta cgcgccgctc ctggcccgtc g 651

```

```

<210> 1340
<211> 21
<212> DNA
<213> Oreochromis niloticus

```

```

<400> 1340
gagcgactgt aggacacgat t 21

```

```

<210> 1341
<211> 21
<212> DNA

```

<213> Oreochromis niloticus

<400> 1341

tgatgctaag aatggctgag a

21

<210> 1342

<211> 610

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 1, 3, 6, 26, 31, 37

<223> n = A,T,C or G

<400> 1342

```

ntntntttcc tagtgatctc ttgganaccc ngccccnttt cgaggctcgac ggtatcgata 60
agcttgatat cgaattcctg cagccccccc agtccaaagc actctgtaac aaagagacaa 120
aataaaaaat ggtggatgaa aaccagcaga ggagtggtcac atgggtgaga gatttataat 180
atgaatgggtt caaactttct cataaatcag tgcaaaatgc tttcaggtag gtatgctgac 240
atttatgcat gagagatgtc aacagaacaa gttcaatgaa gagatgtgtg gaagtgcaac 300
tatgtttata tgggtcccggg gatagaaaac acacacacac acacacacac acacacacac 360
acacacacac acacacagac gcatacatat ttttctctat agggtaaaat catcctgaga 420
attgtgggtt tccccacatg tcgggggaaaa aacatctcag tgattcctca aatgtggggg 480
atccactagt tctagagcgg ccgccaccgc ggtggagctc caattcgccc tatagtgagt 540
cgtattacgc gcgctcactg gccgtcgttt ttacaacgtc gtgactggga aaaccctggc 600
gttaccact                                     610

```

<210> 1343

<211> 20

<212> DNA

<213> Oreochromis niloticus

<400> 1343

ggatgaaaac cagcagagga

20

<210> 1344

<211> 21

<212> DNA

<213> Oreochromis niloticus

<400> 1344

gggacaacca caattctcag g

21

<210> 1345

<211> 590

<212> DNA

<213> Oreochromis niloticus

<220>

<221> misc_feature

<222> 2, 4, 5, 6, 9, 18, 23, 26, 32, 33, 34, 36, 42, 46, 52, 54,
58, 60, 67, 70, 125, 132, 134, 136, 140, 326, 327, 392, 405, 429, 474,
497, 501, 502, 504, 505, 507, 511, 513, 520, 528, 530, 531, 539, 540, 541, 542,
544, 545, 546, 549, 557

<223> n = A,T,C or G

<221> misc_feature

<222> 561, 562, 563, 564, 565, 566, 567, 579, 583, 587

<223> n = A,T,C or G

<400> 1345

```

gngnnnagnt atttgtcnca aanacnaaaaa annncncccc anctgngaaa cncnctancn 60
ataagcnggn gatcgaattc ctgcagccca caaaagcacc cagatgttca aacaccgggg 120
ggacncaaaa anantncacn cacacacaca cacacacaca cacacacaca cacacactga 180
cacacaaaaag gtttcatttg aattcaaacc aaattgactt caggcaaaca aaacgttgct 240
gaaatgatatt tttgtgttag aatctaagaa ttcaggaaat atgttataat gaatgaatta 300
tcagcagctt tgatactttc agacgnngta tttgactcgc tctggtaact gaagctaacc 360
tgtgatgcag tttggtttgt tcgcgtgttg tnagttgctt gtgtngtttc tgtttgctt 420
cctccttgnc ttgtgtgggg gatccactag ttctagagcg gccgccaccg cggnggagct 480
ccaattcgcc ctatagnгаа nncnnantac nncgcctcan tggcccnncn ntttacaann 540
nncnnnacng ggaaaaanccc nnnnnnnaac cccaaactna aanaccntgc 590

```

<210> 1346

<211> 18

<212> DNA

<213> *Oreochromis niloticus*

<400> 1346

aaagcaccca gatgttca 18

<210> 1347

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1347

gctgctgata attcattcat t 21

<210> 1348

<211> 452

<212> DNA

<213> *Oreochromis niloticus*

<400> 1348

```

agtaagtctg agcaaaaactc taaactgact cagaaacaag aagattacac ccttagtcct 60
gatactgagt catgcttgac tttttcaaat gccagtcct gaggacgtca ggttaccttg 120
tagcagaggg ttgccagggt tgacggagac tcctctctga cggctctgat ctctgccgcc 180
ggaaccagag cgaaaacatc ctgaaccgtg gtggaggagt cgaccagaa ctgatcccag 240
aacacgtcgt ctgaggcttc gacgggctgc aggagaggaa acgcacacaa acatcagtg 300
gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgttcgacg tgatgagaaa accaccactg 360
cagctatgac tctgtgactt atctgctgct aaacacatca aatgaaaaca gtatgcaaca 420
ttcatttcat tatgactgtg ttgatgagaa gg 452

```

<210> 1349

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1349

tcctctctga cggctctgat 20

<210> 1350

<211> 20

<212> DNA
 <213> Oreochromis niloticus

<400> 1350
 ctgcagtggt gggttttctca 20

<210> 1351
 <211> 593
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 4, 5, 6, 8, 9, 11, 13, 17, 20, 22, 23, 28, 32, 38, 50, 53,
 62, 97, 125, 127, 507, 510, 521, 523, 527, 531, 539, 545, 547, 548, 552,
 563, 566, 567, 568, 575, 576, 579, 581, 584, 586, 587, 588, 589, 591, 593
 <223> n = A,T,C or G

<400> 1351
 gggnnnannt ntntgtncan gnnatctnaa tntagacncg ccccttttgn agntcgaccg 60
 tntcgataag cttgatatcg aattcctgca gcccctngac cacgggggct cttctgctcc 120
 ttggngncta gaggaggggg gctctcctcg ggggatgaac ccagcgatgt cccccctcc 180
 acctccagag cctggagctt ctgcagggaa ctctgcaggc agaagcagaa catgccagac 240
 aacttggtcc agagattaac caggttccag gcgcagtgtg tgtgtgtgtg tgtgtgtgtg 300
 tgtgtgagtg agtgagtgag agagaagagg tggaatgtag ggcagtgagg cactgttaca 360
 ataaaagact ccagatatta gccagatctc tgaaacatca catgtggaag cacagagcag 420
 gggttagtgt tcaggaaata gtctgatccc acagtttcaa agcataagtc aatgagcctc 480
 ccttccagga attagaccag caccatnncan aaaaacacgt ntncctncag ntttttcana 540
 tattnannat gnggggggat ccnctnnntt aaaannggnc nccncnnnng ngm 593

<210> 1352
 <211> 17
 <212> DNA
 <213> Oreochromis niloticus

<400> 1352
 gaaccacgcg atgtccc 17

<210> 1353
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1353
 actaaccctt gctctgtgct t 21

<210> 1354
 <211> 647
 <212> DNA
 <213> Oreochromis niloticus

<220>
 <221> misc_feature
 <222> 7, 497, 634, 647
 <223> n = A,T,C or G

<400> 1354

```

ttatttntac cactatccct ttggaagccc caccgcgttg gcggccgctc tagaactagt 60
ggatccccc aaagccattc tttgtgaact tctagtctgc ctctgcagag agctttcaca 120
cgcttcaaat agctatcaga acagatgac gagctggata atctccagta tctacagagt 180
ctggatgag cctggcaaaa cagcatttgt gaatcactca ctcacacaca cacacacaca 240
cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca cacacacaca 300
cacacacaca cacacacaca cacacagctt ggaataatac acaagacaaa ctacatttgg 360
agactgtctt cataccctga atcaaaacac cacagtcaaa acatgaaaaa aatgaattat 420
tttgggctgc aggaattcga tatcaagctt atcgataccg tcgacctcga gggggggccc 480
ggtaccagc tttttgntcc ctttagtgag ggttaattgc gcgcttggcg taatcatggg 540
catagctgtt tcctgtgtga aattgttatt cgctcacaat tcacacaaca tacgagccgg 600
aagcataaag gtgtaaagct ggggtgccta tgantgagct aactcan 647

```

<210> 1355

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1355

tgaacttcta gtctgcctct g 21

<210> 1356

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1356

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<210> 1357

<211> 620

<212> DNA

<213> *Oreochromis niloticus*

<220>

<221> misc_feature

<222> 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 17, 19, 22, 26, 28, 31,
36, 38, 44, 47, 56, 617, 620

<223> n = A,T,C or G

<400> 1357

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acagccatcc ccgtctttct ccacactcaa acacacacac acacaccctt gtatatatat 180
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gtgagtcgta ttacgcgcgc tcactggcgc tcgttttaca acgtcgtgac tgggaaaacc 480
ctgggcggtta cccaacttaa tcgccttgca gcacatcccc ctttcgccag ctgggcgtaa 540
tagcgaagag gcccgcaccc atcgcccttc caaacagttg cgcagcctga atggcgaatg 600
gaaaatggta agcgtnatn 620

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<210> 1358

<211> 18

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<213> *Oreochromis niloticus*

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<210> 1359
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<400> 1359
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<223> n = A,T,C or G

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tggctccagt taatcctctg ttgttttgcc atgatgctga cagagagaga gagagagaaa 180
gagagagaga gagagagtgt gtgtgtgtgt gtgtgtgtgt gagagagaga gagagagcga 240
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gccttttgcc ttgttattca aatctgttgg catattttat ccataatccg tgctgtgggtt 480
tggtgttgct gaggtatctt ccctcagaga ggaggtgtct gagttgcagc gagcattgca 540
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<210> 1361
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<210> 1362
<211> 21
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<400> 1362
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<210> 1363
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gcacatctttgc tgttcctacg at 142

<210> 1364
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 <212> DNA
 <213> Oreochromis niloticus

<400> 1364
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<210> 1365
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 <212> DNA
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<400> 1365
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<210> 1366
 <211> 193
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 tgttggtctc caggaccctg acagacctgc tgaaacagca ggggactgag gtgagctcgg 180
 tggaaaatgc cac 193

<210> 1367
 <211> 21
 <212> DNA
 <213> Oreochromis niloticus

<400> 1367
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<210> 1368
 <211> 20
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 <213> Oreochromis niloticus

<400> 1368
 attttccacc gagctcacct 20

<210> 1369
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 <212> DNA
 <213> Oreochromis niloticus

<220>
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 <222> 17, 24, 43, 81, 383, 407, 427, 440, 584
 <223> n = A,T,C or G

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ttgggagagt gaaagacgga agcctctgtt gaatactgat gaagctcagc acaaagcttc 360
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gcccgnnacc cagcttttgn tcccttttagt gagggttaat tgcgcgcttg gcgtaatcat 480
ggtcatactg gtttcctgtg tgaaattgtt atcccgtca caattccaca caacatacga 540
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<210> 1370

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1370

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<210> 1371

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1371

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<210> 1372

<211> 285

<212> DNA

<213> *Oreochromis niloticus*

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<221> misc_feature

<222> 198

<223> n = A,T,C or G

<400> 1372

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tgactgactg agatccgtgc ctttgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt 180
gtgtgtgtgt gtgtttgntc cagctcctga gggaaatatg tgtgttttat aacaaccac 240
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<210> 1373

<211> 19

<212> DNA

<213> *Oreochromis niloticus*

<400> 1373

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<210> 1374

<211> 21

<212> DNA

<213> *Oreochromis niloticus*

<400> 1374

tgctgaagtg ttatcgctgt g

21

<210> 1375

<211> 497

<212> DNA

<213> *Oreochromis niloticus*

<400> 1375

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gtctgtctgc cttacaccag actaaacaca tacagacaca cagacacaca cacacacacg 180
tacattcagc ttttcattaa atataccagt gacaggatat gacaagctct cccagctttt 240
taatttagcg ccggtgtccg cccacctcct cagagagctg gtctaaaacc tgtcactgcc 300
aacagttgag ggatgacaag gtaattaata gtttcactac aatgcagcca actcttttag 360
gagctggaca gacaggatga gcagaaaaac aaggaagcat gtggagagag gagagattag 420
gaggcagggg atgagcaaaa aatattgaca gacagagcag gaagatgaac agaaatagtc 480
tggtaaacca gacggggg                                497
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<210> 1376

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1376

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20

<210> 1377

<211> 20

<212> DNA

<213> *Oreochromis niloticus*

<400> 1377

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20